



**BLUE ROCK
ENVIRONMENTAL, INC.**

Mr. Cody Walker
Associate Engineering Geologist
North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

April 12, 2006

Re: First Quarter 2006 Groundwater Monitoring Report
Cedar Stock Resort
45810 State Highway 3
Trinity Center, California
RWQCB case # 1TTR033
Blue Rock Project No. NC-017

Dear Mr. Walker,

This report presents the results of the First Quarter 2006 groundwater monitoring activities at Cedar Stock Resort located at 45810 State Highway 3, Trinity Center, California. (site) (Figure 1), and was prepared for Mr. Cliff Johanssen of Boots and Boats Inc. by Blue Rock Environmental Inc. (Blue Rock).

Background

Site Description

Cedar Stock Resort is located adjacent to Trinity Lake in Trinity County California (Figure 1). The site is bounded by open forest land with some residential development. Cedar Stock Resort consists of a developed dock and additional parking areas around the former UST locations and a Lodge/Restaurant above the site. There are also various buildings near the site used for rental cabins, boat storage and residences. The resort uses a septic system located approximately 500 feet north of the former UST locations for sewage disposal. Drinking water is supplied by a well located about 1/4 mile north of the former USTs. The two gasoline USTs were previously located on the eastern side of the marina parking area (Figure 2).

The site slopes moderately to steeply toward the east. The Trinity Lake shoreline (high water line at 2,370 feet elevation above mean sea level (msl)) comprises the eastern boundary of the property. To the west, the property rises to 2,600 feet in elevation.

Site History

Cedar Stock Resort was developed in 1962 as a boat launching and storage facility and resort destination. The site was leased from the U.S. Department of Agriculture (USDA) by Boots and Boats Inc. in the early 1970s. In 1980 or 1981, two 5,000-gallon underground gasoline storage tanks (UST) were installed to supply fuel to boat traffic on Trinity Lake. Fuel was delivered via above ground piping to dispensers located on the dock.

Site Investigation and Corrective Action History

In September 1994, the two 5,000 gallon USTs were removed by Evans Construction (Evans). As evidenced by analysis of soil removed from the excavation, concentrations of total petroleum hydrocarbons as gasoline (TPHg) ranged to 2,000 parts per million (ppm). The tank cavity was overexcavated to a depth of approximately 40 feet below ground surface (bgs) to remove hydrocarbons acting as a source of groundwater contamination. Due to adverse site conditions no further overexcavation was performed. The excavation was subsequently backfilled with clean fill.

In an effort to evaluate the lateral extent of petroleum hydrocarbon impact to site soil and groundwater, Clearwater Group (Clearwater) supervised the installation of five soil borings (B-1 to B-5) and four monitoring wells (MW-1 to MW-4) in 1996 and 1997. Gasoline constituent contamination in soil and groundwater were detected in boring B-1 approximately 25 feet downgradient of the former excavation. Analysis of groundwater samples indicated concentrations of TPHg at 2,400 micrograms per liter ($\mu\text{g/L}$), MTBE at 2,000 $\mu\text{g/L}$, and benzene at 940 $\mu\text{g/L}$. A grab groundwater sample collected from boring B-5 (40 feet northeast of the UST excavation) indicated concentrations of TPHg at 1,900 $\mu\text{g/L}$, MTBE at 41 $\mu\text{g/L}$, and benzene at 160 $\mu\text{g/L}$. Quarterly groundwater monitoring and sampling of the monitoring wells was performed through the remainder of 1997 and continued through 1998. As the site was considered a low priority by the North Coast Regional Water Quality Control Board (NCRWQCB), no direction for additional quarterly monitoring was provided. Subsequently, no quarterly monitoring was performed in 1999. At the direction of Dean Prat of the NCRWQCB quarterly groundwater monitoring was resumed in January 2000.

On May 4, 2000, in an effort to better evaluate groundwater flow characteristics at the site, Clearwater supervised Diamond Core Drilling of Redding, California in the installation of two additional monitoring wells (MW-5 and MW-6) to the north and east of the former excavation. Well installation activities were approved verbally by Mr. Dean Pratt of the NCRWQCB. Results of this investigation are presented in Clearwater's *Monitoring Well Installation and Groundwater Monitoring Report Second Quarter 2000* dated July 18, 2000. Well construction data are presented in Table 1.

On March 4 and 5, 2002, Clearwater supervised, Mitchell Drilling Environmental of Rancho Cordova, California in the drilling four soil borings to a depth of approximately 60 feet bgs (Figure 2). The purpose of the proposed additional investigation was to provide the data needed for the preparation of the required Corrective Action Plan (CAP). Results of this investigation are presented in Clearwater's *Corrective Action Plan (CAP) / Sensitive Receptor Survey / Additional Investigation Report* dated April 26, 2002. In a letter dated June 4, 2002, the NCRWQCB approved the CAP which outlined soil vapor extraction (SVE) as the preferred remedial alternative to treat sorbed-phase contamination and monitored natural attenuation for treating dissolved-phase contamination and requested the submittal of a workplan to perform an SVE pilot study.

Clearwater subsequently prepared and submitted a *Workplan for Vapor Extraction Pilot Study* dated August 10, 2002. The workplan was approved in a NCRWQCB letter dated September 9, 2002. The pilot study was performed in October 2002. The results of the monitored natural attenuation study were favorable; however, the results of the SVE test were not favorable. Therefore, low vacuum SVE was not considered to be a technically viable remedial alternative. Results of the pilot study and natural attenuation feasibility study were submitted in Clearwater's *Second Quarter 2003 and Remedial Action Plan* dated July 21, 2003.

In a letter dated September 25, 2003, the NCRWQCB concurred with Clearwater's evaluation of the monitoring data and recommendation to continue natural attenuation monitoring for a one year period. In the letter, the NCRWQCB requested a summary report be submitted following a one year period and should include an estimate of time for natural attenuation to restore beneficial uses of groundwater at the site and the evaluation of at least one additional remedial alternative and a cost comparison of the remedial alternatives.

In May 2004, Blue Rock was retained to continue site activities. Blue Rock performed the Second Quarter 2004 groundwater monitoring event and subsequently submitted the *Remedial Action Plan Addendum / Summary Report / Second Quarter 2004 Groundwater Monitoring Report* dated July 20, 2004 which conveyed the data requested in the September 25, 2003, NCRWQCB letter and requested the site be evaluated for closure. The NCRWQCB denied the closure request in a letter dated September 8, 2004 and requested groundwater monitoring be performed on a semi annual basis.

From October 31, to November 4, 2005 Blue Rock performed a 5 day dual-phase extraction (DPE) event per the *Workplan for Mobile High-Vacuum Dual-Phase Extraction Treatment* dated August 18, 2005 which was approved in the NCRWQCB letter dated September 15, 2005. The DPE event was successful in demonstrating that TPHg, BTEX, and MTBE can be removed from the subsurface using this technology. Influent concentrations of TPHg were averaged approximately 350 mg/m³. In the vapor-phase, TPHg removal rates ranged from 0.7 to 4.2 lbs/day and MTBE removal rates ranged from 0.01 to 0.03 lbs/day. DPE appeared to be successful at lowering concentrations of target analytes at the extraction point based on the results of the pre-test and post-test samples collected from MW-1. Specifically, TPHg was reduced from 730 µg/L (pre-test 10/31/05) to 260 µg/L (post-test 11/4/05), benzene was reduced from 5.8 µg/L (pre-test 10/31/05) to 1.6 µg/L (post-test 11/4/05), and MTBE was reduced from 240 µg/L (pre-test 10/31/05) to 210 µg/L (post-test 11/4/05). Data collected during this event were reported in the *Dual-Phase Extraction Treatment Report* dated November 28, 2005.

Field and Laboratory Activities - First Quarter 2006

Groundwater Monitoring Activities

On March 22, 2006 six wells (MW-1 through MW-6) were monitored and sampled. Prior to sampling, an electronic water level indicator was used to gauge depth to water in each well, accurate to within ± 0.01 -foot. A downhole dissolved oxygen (DO) meter was used to measure concentrations of DO. All wells were checked for the presence of light non-aqueous phase liquid (LNAPL) petroleum prior to purging. No measurable thicknesses of LNAPL were observed on groundwater in any of the wells.

In preparation for sampling, the wells were purged of groundwater until sampling parameters (temperature, pH, and conductivity) stabilized. Following recovery of water levels to approximately 80% of their static levels, groundwater samples were collected from the wells using disposable polyethylene bailers and transferred to laboratory supplied containers. Sample containers were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Purging instruments were cleaned between use by an Alconox[®] wash followed by double rinse in clean tap water to prevent cross-contamination. Purge and rinse water was stored on-site in labeled 55-gallon drums pending future removal and disposal.

Groundwater monitoring and well purging information is presented on Gauge Data/Purge Calculations and Purge Data sheets (Appendix A).

Groundwater Sample Analyses

Groundwater samples were analyzed by Kiff Analytical (Kiff), a DHS-certified laboratory, located in Davis, California, for the following analytes:

- TPHg, BTEX, MTBE by EPA Method 8260B

Groundwater Monitoring Results - First Quarter 2006

Groundwater Flow Direction and Gradient

Static groundwater in the wells was present beneath the site at depths ranging from approximately 14.37 (MW-6) to 30.89 (MW-3) feet bgs. Gauging data, combined with well elevation data, were used to calculate groundwater elevations, and to generate a groundwater elevation and gradient map. The groundwater flow direction was calculated to range from southeast at 0.40 ft/ft in the area of the former USTs and becoming east at 0.13 ft/ft downgradient (Figure 3). The groundwater gradient and flow direction is consistent with previous measurements.

Groundwater Contaminant Analytical Results

LNAPL: None
TPHg concentration: <50 µg/L (MW-2 to MW-6) to 870 µg/L (MW-1)
MTBE concentration: <0.5 µg/L (MW-3 & MW-5) to 410 µg/L (MW-1)
Benzene concentration: <0.5 µg/L (MW-3 to MW-6) to 16 µg/L (MW-1)

Groundwater sample analytical results are shown graphically on Figures 4 and 5. Cumulative groundwater sample analytical results are summarized in Table 2. Copies of the field notes, laboratory report and chain-of-custody form are presented in Appendix A and B.

Remarks

Groundwater sample analytical results are consistent with previous groundwater data. The plume of dissolved-phase hydrocarbons appears to be stable with decreasing and/or stable concentrations of target analytes.

Natural Attenuation Monitoring Program

First Order Decay Rates

Trends in dissolved-phase concentrations were evaluated for MW-1 and MW-2, the only historically impacted wells. TPHg, benzene, and MTBE for those wells were plotted against time since January 2000 (the highest concentration of TPHg recorded). An exponential equation was fitted to each data set to calculate first-order decay rates (Appendix C). The method presented by Buscheck, O'Reilly, and Nelson (1993) was used to calculate first-order decay rates by the following equation:

$$C(t) = C_0 e^{-(kt)}$$

Where,

$C(t)$ is concentration as a function of time (t)

C_0 = is concentration as $t = 0$

k = is the decay rate (t^{-1})

Trend lines fit to these data sets indicate the following contaminant decay rates:

Well	TPHg Decay Rate (day ⁻¹)	Benzene Decay Rate (day ⁻¹)	MTBE Decay Rate (day ⁻¹)
MW-1	0.001	0.0027	0.0007
MW-2	0.013	0.0017	0.0007

Although first order decay rates indicate that the dissolved-phase concentrations continue to decline, they may not reach Clean-up Goals in a reasonable timeframe if extrapolated from current concentrations. Further reduction in existing concentrations would result in a shorter estimated timeframe to meet Clean-up Goals.

Certification

This report was prepared under the supervision of a California Professional Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

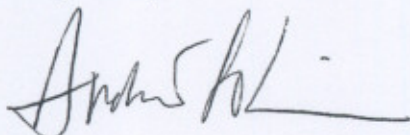
Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

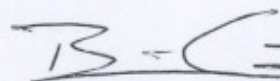
Sincerely,
Blue Rock Environmental, Inc.

Prepared by:

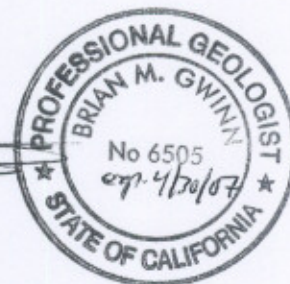


Andrew LoCicero
Project Scientist

Reviewed by:



Brian Gwinn, PG
Principal Geologist



Attachments:

Table 1: Well Construction Data
Table 2: Groundwater Elevation and Analytical Data
Table 3: Intrinsic Bioremediation Data
Figure 1: Site Location Map
Figure 2: Site Plan
Figure 3: Groundwater Elevations and Gradient - March 22, 2006
Figure 4: Dissolved-Phase TPHg Distribution - March 22, 2006
Figure 5: Dissolved-Phase MTBE Distribution - March 22, 2006
Figure 6: Intrinsic Bioremediation Data - March 22, 2006

Appendix A: Blue Rock Gauge/Purge Calculations and Well Purging Data field sheets
Appendix B: Laboratory Analytical Report and Chain-of-Custody Form
Appendix C: First Order Decay Rate Graphs
Appendix D: Dissolved-Phase Mass Calculations and Graphs

cc:

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TABLES

Table 1
WELL CONSTRUCTION DATA

Cedar Stock Resort
45180 State Highway 3
Trinity Center, California
Project No. NC-017

Well Identification	Date Installed	Installed by	Casing Diameter (inches)	Total Depth (feet)	Blank Interval (feet)	Screened Interval (feet)	Slot Size (inches)	Filter Pack (feet)	Bentonite Seal (feet)	Cement (feet)
MW-1	11/18/97	Clearwater	2	40	0-20	20-40	0.02	18-40	16-18	0-16
MW-2	11/18/97	Clearwater	2	40	0-20	20-40	0.02	18-40	16-18	0-16
MW-3	11/18/97	Clearwater	2	40	0-20	20-40	0.02	18-40	16-18	0-16
MW-4	11/18/97	Clearwater	2	40	0-20	20-40	0.02	18-40	16-18	0-16
MW-5	8/30/00	Clearwater	2	35	0-15	15-35	0.02	14-35	12-14	0-12
MW-6	8/30/00	Clearwater	2	35	0-15	15-35	0.02	14-35	12-14	0-12

Table 2
GROUNDWATER ELEVATION AND ANALYTICAL DATA

Cedar Creek Resort
45810 State Highway 3
Trinity Center, California
Project No. NC-017

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-1 Screen 20'-40'	11/23/97	2383.55	28.41	2355.14	4,500	3,100	11	13	36	2,200	--	--	--	--	--	--
	12/22/97	2383.55	29.06	2354.49	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/98	2383.55	31.46	2352.09	--	--	--	--	--	--	--	--	--	--	--	--
	2/26/98	2383.55	34.36	2349.19	2,300	65	<0.5	0.6	<0.5	390	--	--	--	--	--	--
	3/14/98	2383.55	32.68	2350.87	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/98	2383.55	26.59	2356.96	--	--	--	--	--	--	--	--	--	--	--	--
	5/16/98	2383.55	24.12	2359.43	910	180	7.2	1.3	6.7	110	--	--	--	--	--	--
	6/6/98	2383.55	24.79	2358.76	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/98	2383.55	22.23	2361.32	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/98	2383.55	15.81	2367.74	95	25	<0.5	<0.5	0.65	26	--	--	--	--	--	--
	10/2/98	2383.55	16.44	2367.11	--	--	--	--	--	--	--	--	--	--	--	--
	11/27/98	2383.55	23.77	2359.78	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/98	2383.55	21.18	2362.37	1,100	260	4.4	5.6	7.3	95	--	--	--	--	--	--
	1/11/00	2383.55	23.25	2360.30	17,600	4,600	27	320	254	1,700	--	--	--	--	--	--
	5/4/00	2383.55	18.29	2365.26	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/00	2383.55	15.97	2367.38	3,140	2,250	6.9	3.1	62	861	--	--	--	--	--	--
	9/26/00	2383.55	21.75	2361.80	11,900	4,750	17	174	127	2,910	--	--	--	--	--	--
MW-2 Screen 20'-40'	12/22/00	2383.55	25.49	2358.06	4,800	1,620	7.6	28.2	36.5	1,860	--	--	--	--	--	--
	3/5/01	2383.55	27.05	2356.50	1,900	1,130	2.5	1.6	3.1	939	--	--	--	--	--	--
	6/13/01	2383.55	26.04	2357.51	4,700	1,400	3	2.1	3.7	1,100	--	--	--	--	--	--
	9/21/01	2383.55	28.73	2354.82	4,300	1,400	<5	<5	<5	1,200	84	<5	<5	<5	<2,000	<50
	12/15/01	2383.55	36.39	2347.16	410	15	<1	<1	<1	360	370	<1	<1	<1	<1,700	<10
	3/15/02	2383.55	29.76	2353.79	2,400	440	<5	<5	<5	1,400	--	--	--	--	--	--
	6/26/02	2383.55	26.78	2356.77	5,600	1,600	<10	<10	<10	1,700	--	--	--	--	--	--
	9/25/02	2383.55	29.38	2354.17	6,400	1,300	<10	<10	<10	1,800	--	--	--	--	--	--
	12/12/02	2383.55	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	(3/20/2003)	2421.70	32.42	2389.28	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/03	2421.70	23.62	2398.08	420	23	<1	<1	<1	550	--	--	--	--	--	--
	9/24/03	2421.70	23.47	2398.23	2,300	220	<1.5	<1.5	<1.5	710	--	--	--	--	--	--
	12/15/03	2421.70	27.95	2391.75	2,600	120	<2	<2	<2	940	--	--	--	--	--	--
	3/4/04	2421.70	24.41	2397.29	2,800	44	<1	<1	<1	510	--	--	--	--	--	--
	6/14/04	2421.70	20.17	2401.53	1,500	88	<1.5	3.2	<1.5	440	--	--	--	--	--	--
	12/15/04	2421.70	30.38	2391.32	1,400	46	<1	<1	<1	500	--	--	--	--	--	--
	6/23/05	2421.70	24.86	2396.84	1,800	41	<0.5	<0.5	<0.5	360	--	--	--	--	--	--
	12/29/05	2421.70	35.04	2386.66	270	2.6	<0.5	<0.5	<0.5	350	--	--	--	--	--	--
	3/22/06	2421.70	25.69	2396.01	870	16.0	<0.5	<0.5	<0.5	410	--	--	--	--	--	--
MW-2 Screen 20'-40'	11/23/97	2380.71	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/22/97	2380.71	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/98	2380.71	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/26/98	2380.71	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/14/98	2380.71	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/98	2380.71	24.44	2356.27	--	--	--	--	--	--	--	--	--	--	--	--
	5/16/98	2380.71	22.21	2358.50	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	6/6/98	2380.71	22.63	2358.08	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/98	2380.71	21.20	2359.51	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/98	2380.71	17.90	2362.81	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	10/2/98	2380.71	17.21	2363.50	--	--	--	--	--	--	--	--	--	--	--	--
	11/27/98	2380.71	26.50	2354.21	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/98	2380.71	27.75	2352.96	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	1/11/00	2380.71	33.57	2347.14	880	34	<1	<0.5	<1	170	--	--	--	--	--	--
	5/4/00	2380.71	16.67	2364.04	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
GROUNDWATER ELEVATION AND ANALYTICAL DATA

Cedar Creek Resort
45810 State Highway 3
Trinity Center, California
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Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-2	6/1/00	2380.71	12.70	2368.01	<50	<0.3	<0.3	<0.3	0.6	<2	—	—	—	—	—	—
Screen	9/26/00	2380.71	33.79	2346.92	1,430	74	<0.3	<0.3	<0.6	562	—	—	—	—	—	—
20-40"	12/22/00	2380.71	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—
3/3/01	2380.71	39.18	2341.53	1470	39.5	39.5	<0.3	<0.3	<0.6	453	—	—	—	—	—	—
6/13/01	2380.71	32.95	2347.76	520	19	19	<1	<1	1.1	300	—	—	—	—	—	—
9/21/01	2380.71	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12/15/01	2380.71	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3/15/02	2380.71	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6/26/02	2380.71	34.02	2346.69	300	11	11	<0.5	<0.5	<0.5	280	—	—	—	—	—	—
9/25/02	2380.71	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12/12/02	2380.71	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3/20/2003)	2418.91	36.94	2381.97	<50	<0.5	<0.5	<0.5	<0.5	<0.5	85	—	—	—	—	—	—
6/11/03	2418.91	17.01	2401.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	39	—	—	—	—	—	—
9/24/03	2418.91	31.00	2387.91	180	4.1	4.1	<0.5	<0.5	<0.5	82	—	—	—	—	—	—
12/15/03	2418.91	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3/4/04	2418.91	28.68	2390.23	78	1.8	1.8	<0.5	<0.5	<0.5	46	—	—	—	—	—	—
6/14/04	2418.91	22.21	2396.70	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	—	—	—	—	—	—
12/15/04	2418.91	39.94	2378.97	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
6/23/05	2418.91	28.11	2390.80	<50	0.74	0.74	<0.5	<0.5	<0.5	12	—	—	—	—	—	—
12/29/05	2418.91	37.02	2381.89	<50	<0.5	<0.5	<0.5	<0.5	<0.5	2.4	—	—	—	—	—	—
3/22/06	2418.91	28.75	2390.16	<50	0.68	0.68	<0.5	<0.5	<0.5	24	—	—	—	—	—	—
MW-3	11/23/97	2388.95	38.75	2350.20	<50	<0.5	<0.5	<0.5	<2	16	—	—	—	—	—	—
Screen	12/22/97	2388.95	39.8	2349.15	—	—	—	—	—	—	—	—	—	—	—	—
20-40"	2/1/98	2388.95	39.64	2349.31	—	—	—	—	—	—	—	—	—	—	—	—
2/26/98	2388.95	36.06	2352.89	<50	<0.5	0.6	0.7	<0.5	<0.5	<5	—	—	—	—	—	—
3/14/98	2388.95	34.76	2354.19	—	—	—	—	—	—	—	—	—	—	—	—	—
4/25/98	2388.95	29.06	2359.89	—	—	—	—	—	—	—	—	—	—	—	—	—
5/16/98	2388.95	27.25	2361.70	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	—	—	—	—	—	—
6/6/98	2388.95	28.14	2360.81	—	—	—	—	—	—	—	—	—	—	—	—	—
7/18/98	2388.95	26.18	2362.77	—	—	—	—	—	—	—	—	—	—	—	—	—
9/3/98	2388.95	20.61	2368.34	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	—	—	—	—	—	—
10/2/98	2388.95	19.97	2368.98	—	—	—	—	—	—	—	—	—	—	—	—	—
11/27/98	2388.95	26.24	2362.71	—	—	—	—	—	—	—	—	—	—	—	—	—
12/15/98	2388.95	27.38	2361.37	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	—	—	—	—	—	—
1/11/00	2388.95	30.96	2357.99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	—	—	—	—	—	—
5/4/00	2388.95	23.42	2365.53	—	—	—	—	—	—	—	—	—	—	—	—	—
6/1/00	2388.95	20.53	2368.42	<50	<0.3	<0.3	<0.3	<0.3	<0.6	3	—	—	—	—	—	—
9/26/00	2388.95	28.92	2360.03	<50	<0.3	<0.3	<0.3	<0.3	<0.6	9.6	—	—	—	—	—	—
12/22/00	2388.95	35.03	2353.92	<50	<0.3	<0.3	<0.3	<0.3	<0.6	<2	—	—	—	—	—	—
3/30/01	2388.95	36.96	2351.99	<50	<0.3	<0.3	<0.3	<0.3	<0.6	5.2	—	—	—	—	—	—
6/13/01	2388.95	34.22	2354.73	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	—	—	—	—	—	—
9/21/01	2388.95	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12/15/01	2388.95	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3/15/02	2388.95	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6/26/02	2388.95	35.43	2353.52	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
9/25/02	2388.95	39.82	2349.13	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
12/12/02	2388.95	Dry	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3/20/2003)	2427.12	39.11	2388.01	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
6/11/03	2427.12	28.24	2398.88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
9/24/03	2427.12	30.44	2396.68	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
12/15/03	2427.12	37.56	2389.56	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
3/4/04	2427.12	32.01	2395.11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
6/14/04	2427.12	26.07	2401.05	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.72	—	—	—	—	—	—
12/15/04	2427.12	39.88	2387.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5	1	—	—	—	—	—	—
6/23/05	2427.12	32.93	2394.19	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—
12/29/05	2427.12	36.38	2390.74	<50	<0.5	<0.5	<0.5	<0.5	<0.5	0.73	—	—	—	—	—	—
3/22/06	2427.12	30.89	2396.23	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—

Table 2
GROUNDWATER ELEVATION AND ANALYTICAL DATA

Cedar Creek Resort
45810 State Highway 3
Trinity Center, California
Project No. NC-017

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-4 Screen 20-40	11/23/97	2373.00	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/22/97	2373.00	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/98	2373.00	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/26/98	2373.00	30.35	2342.65	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	3/14/98	2373.00	23.71	2349.29	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/98	2373.00	21.16	2351.84	--	--	--	--	--	--	--	--	--	--	--	--
	5/16/98	2373.00	17.94	2355.06	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	6/6/98	2373.00	16.07	2356.93	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/98	2373.00	15.75	2357.25	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/98	2373.00	12.38	2360.62	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	10/2/98	2373.00	11.94	2361.06	--	--	--	--	--	--	--	--	--	--	--	--
	11/27/98	2373.00	21.04	2351.96	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/98	2373.00	22.21	2350.79	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	1/11/00	2373.00	28.38	2344.62	<50	<0.5	<0.5	<0.5	<0.5	<5	--	--	--	--	--	--
	5/4/00	2373.00	9.81	2363.19	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/00	2373.00	5.31	2367.69	<50	<0.3	<0.3	<0.3	0.8	<2	--	--	--	--	--	--
	9/26/00	2373.00	37.65	2345.35	<50	<0.3	<0.3	<0.3	<0.60	<2	--	--	--	--	--	--
	12/22/00	2373.00	33.94	2339.06	<50	<0.3	<0.3	<0.3	<0.60	<2	--	--	--	--	--	--
	3/30/01	2373.00	33.21	2339.79	<50	<0.3	<0.3	<0.3	<0.60	4.5	--	--	--	--	--	--
	6/13/01	2373.00	27.22	2345.78	<50	<0.5	<0.5	<0.5	<0.5	0.85	--	--	--	--	--	--
	9/21/01	2373.00	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/01	2373.00	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/15/02	2373.00	36.47	2336.53	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/28/02	2373.00	38.11	2344.89	<50	<0.5	<0.5	<0.5	<0.5	0.64	--	--	--	--	--	--
	9/25/02	2373.00	38.39	2334.61	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/12/02	2373.00	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	(3/20/2003)	2411.13	31.24	2379.89	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/11/03	2411.13	8.30	2402.83	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	9/24/03	2411.13	24.83	2386.30	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/15/03	2411.13	33.11	2378.02	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/4/04	2411.13	22.41	2388.72	<50	<0.5	<0.5	<0.5	<0.5	1.3	--	--	--	--	--	--
	6/14/04	2411.13	16.55	2394.58	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/15/04	2411.13	39.43	2371.70	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/23/05	2411.13	22.25	2388.88	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/29/05	2411.13	29.83	2381.30	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/22/06	2411.13	22.28	2388.85	<50	<0.5	<0.5	<0.5	<0.5	0.52	--	--	--	--	--	--
MW-5 Screen 15-35	5/4/00	2376.88	22.92	2353.96	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1	<1	<1	--	--
	6/1/00	2376.88	12.02	2364.86	<50	<0.3	<0.3	<0.3	<0.6	<2	--	--	--	--	--	--
	9/26/00	2376.88	22.87	2354.01	<50	<0.3	<0.3	<0.3	<0.6	<2	--	--	--	--	--	--
	12/22/00	2376.88	30.72	2346.16	<50	<0.3	<0.3	<0.3	<0.6	<2	--	--	--	--	--	--
	3/30/01	2376.88	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/01	2376.88	29.23	2347.65	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	9/21/01	2376.88	31.54	2345.34	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/01	2376.88	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/15/02	2376.88	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/26/02	2376.88	30.84	2346.04	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	9/25/02	2376.88	31.52	2345.36	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/12/02	2376.88	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	(3/20/2003)	2415.04	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/03	2415.04	22.50	2392.54	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--

Table 2
GROUNDWATER ELEVATION AND ANALYTICAL DATA

Cedar Stock Resort
45810 State Highway 3
Trinity Center, California
Project No. NC-017

Well No.	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH _g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-5 Screen 15'-35'	9/24/03	2415.04	22.56	2392.48	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/15/03	2415.04	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	2415.04	26.24	2388.80	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/14/04	2415.04	18.92	2396.12	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/15/04	2415.04	31.56	2383.48	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/23/05	2415.04	18.23	2396.81	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/29/05	2415.04	31.53	2383.51	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/22/06	2415.04	25.23	2389.81	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
MW-6 Screen 15'-35'	5/4/00	2379.53	22.11	2357.42	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<1	<1	<1	--	--
	6/1/00	2379.53	9.71	2369.82	<50	<0.3	<0.3	<0.3	<0.6	<2	--	--	--	--	--	--
	9/26/00	2379.53	24.88	2354.65	<50	<0.3	<0.3	<0.3	<0.6	2.3	--	--	--	--	--	--
	12/22/00	2379.53	29.47	2350.06	<50	<0.3	<0.3	<0.3	<0.6	<2	--	--	--	--	--	--
	3/30/01	2379.53	27.93	2351.60	<50	<0.3	<0.3	<0.3	<0.6	<2	--	--	--	--	--	--
	6/13/01	2379.53	24.48	2355.05	<50	<0.5	<0.5	<0.5	<0.5	2.1	--	--	--	--	--	--
	9/21/01	2379.53	32.21	2347.32	<50	<0.5	<0.5	<0.5	<0.5	1.9	--	--	--	--	--	--
	12/15/01	2379.53	28.43	2351.10	<50	<0.5	<0.5	<0.5	<0.5	3.2	<5	<0.5	<0.5	<0.5	--	--
	3/15/02	2379.53	24.49	2355.04	<50	<0.5	<0.5	<0.5	<0.5	1.5	--	--	--	--	--	--
	6/26/02	2379.53	24.85	2354.68	<50	<0.5	<0.5	<0.5	<0.5	1.5	--	--	--	--	--	--
	9/25/02	2379.53	32.13	2347.40	<50	<0.5	<0.5	<0.5	<0.5	1.8	--	--	--	--	--	--
	12/12/02	2379.53	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--
	(3/20/2003)	2417.72	24.79	2392.93	<50	<0.5	<0.5	<0.5	<0.5	2.4	--	--	--	--	--	--
	6/11/03	2417.72	11.77	2405.95	<50	<0.5	<0.5	<0.5	<0.5	1.6	--	--	--	--	--	--
	9/24/03	2417.72	22.95	2394.77	<50	<0.5	<0.5	<0.5	<0.5	1.5	--	--	--	--	--	--
	12/15/03	2417.72	No Access	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	2417.72	No Access	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/04	2418.72	15.91	2402.81	<50	<0.5	<0.5	<0.5	<0.5	1.4	--	--	--	--	--	--
	12/15/04	2418.72	18.28	2400.44	<50	<0.5	<0.5	<0.5	<0.5	1.8	--	--	--	--	--	--
	6/23/05	2418.72	18.00	2400.72	<50	<0.5	<0.5	<0.5	<0.5	1.0	--	--	--	--	--	--
	12/29/05	2418.72	20.08	2398.64	<50	<0.5	<0.5	<0.5	<0.5	1.3	--	--	--	--	--	--
	3/22/06	2418.72	14.37	2404.35	<50	<0.5	<0.5	<0.5	<0.5	0.99	--	--	--	--	--	--
Taste & odor threshold					5	--	42	29	17	--						
MCL					--	1	150	750	1,750	5						
NCRWQCB Cleanup Goals					<50	0.50	42	29	17	5						

Notes:

TOC: Top of casing referenced to US Bureau of Reclamation Trinity Lake level (2293.78 feet above mean sea level).

DTW: Depth to water as referenced to benchmark.

GWE: Ground water elevation as referenced to benchmark

µg/L = micrograms per liter

"--": Not analyzed, available, or applicable

<BBL: Not detected at or below the method detection limit as shown.

MCL: Maximum contaminant level, and enforceable drinking water standard

Taste & odor threshold: A drinking water standard

TPH_g total petroleum hydrocarbons as gasoline by EPA Method 8260B

MTBE: Methyl tertiary butyl ether by EPA Method 8260B

TBA: Tert butanol by EPA Method 8260B

DIPE: Di isopropyl ether by EPA Method 8260B

ETBE: Ethyl tertiary butyl ether by EPA Method 8260B

TAME: tertiary amyl methyl ether by EPA Method 8260B

NCRWQCB: North Coast Regional Water Quality Control Board

Sample date in parentheses indicated new wellhead survey per Geotracker

Table 3
INTRINSIC BIOREMEDIATION DATA

Cedar Stock Resort
45810 State Highway 3
Trinity Center, California
Project No. NC-17

Well No.	Date	TPHg (µg/L)	MTBE (µg/L)	D.O.* (mg/L)	Eh* (mV)	pH*	Total Alkalinity (mg/L)	Nitrate (mg/L)	Ammonia (mg/L)	Sulfate (mg/L)	Ortho Phosphate (mg/L)	Ferrous Iron (mg/L)	TOC (mg/L)	COD (mg/L)	BOD (mg/L)	Heterotrophic Plate Count (CFU/mL)	Aerobic Hydrocarbon Degraders (CFU/mL)	Anaerobic Hydrocarbon Degraders (CFU/mL)
MW-1	9/25/02	6,400	1,800	4.01	107.3	5.20	87	0.54	0.21	0.84	<0.5	--	4.98	36	--	5,000	500,000	100
	12/12/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/20/03	<500	1,400	1.96	98	5.94	88	<0.5	<0.1	0.82	<0.5	<0.1	<2	17	<3	7,000	60,000	1,000
	6/11/03	420	550	1.96	305	5.86	74	<0.5	0.58	1.3	<0.5	<0.1	5.2	16	<3	200,000 / 35,000	50,000	35,000
	9/24/03	2,300	710	1.79	270.5	6.04	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/03	2,600	940	1.78	237.1	6.19	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	2,000	510	1.74	218.0	6.44	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/04	1,500	440	1.58	--	5.96	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/04	1,400	560	2.09	--	6.39	--	--	--	--	--	--	--	--	--	--	--	--
	6/23/05	1,800	360	2.68	--	5.73	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/05	270	350	7.95	--	4.62	--	--	--	--	--	--	--	--	--	--	--	--
	3/22/06	870	410	6.20	--	6.23	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	9/25/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/20/03	<50	85	1.88	61	6.48	95	<0.5	0.21	0.82	<0.5	<0.1	3	7.9	6	20,000	4,000	500
	6/11/03	<50	39	1.88	268	6.26	73	1.1	0.17	1.10	<0.5	<0.1	4	<7	<3	20,000 / 200	600	4,000
	9/24/03	180	82	1.83	212.6	6.12	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/03	Dry no sample				--	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	78	46	1.88	212	6.63	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/04	<50	1	1.73	--	6.20	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/04	<50	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/23/05	<50	12	1.91	--	5.68	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/05	<50	2.40	1.50	--	4.79	--	--	--	--	--	--	--	--	--	--	--	--
	3/22/06	<50	24.0	2.52	--	6.17	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	9/25/02	<50	<0.5	4.40	228	5.12	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/20/03	<50	<0.5	1.95	63	6.47	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/03	<50	<0.5	1.92	287	6.01	--	--	--	--	--	--	--	--	--	--	--	--
	9/24/03	<50	<0.5	1.91	168	6.17	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/03	<50	<0.5	1.79	262	6.22	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	<50	<0.5	1.71	242	6.47	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/04	<50	0.72	1.67	--	6.10	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/04	<50	1.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/23/05	<50	<0.5	4.20	--	5.76	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/05	<50	0.73	6.52	--	4.94	--	--	--	--	--	--	--	--	--	--	--	--
	3/22/06	<50	<0.5	6.41	--	6.07	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	9/25/02	<50	<0.5	5.40	187	5.37	78	2.9	<0.10	1.1	<0.5	--	<1	<10	--	3,000	4,000	4,000
	12/12/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/20/03	<50	<0.5	1.82	69	6.38	68	2.2	0.13	0.79	<0.5	<0.1	3.2	<7	<3	3,500	550	3,000
	6/11/03	<50	<0.5	1.83	331	6.16	77	2.6	0.17	0.86	<0.5	<0.1	2.9	<7	<3	8,000 / 2,000	50	2,000
	9/24/03	<50	<0.5	1.82	314.8	6.26	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
INTRINSIC BIOREMEDIATION DATA

Cedar Stock Resort
45810 State Highway 3
Trinity Center, California
Project No. NC-17

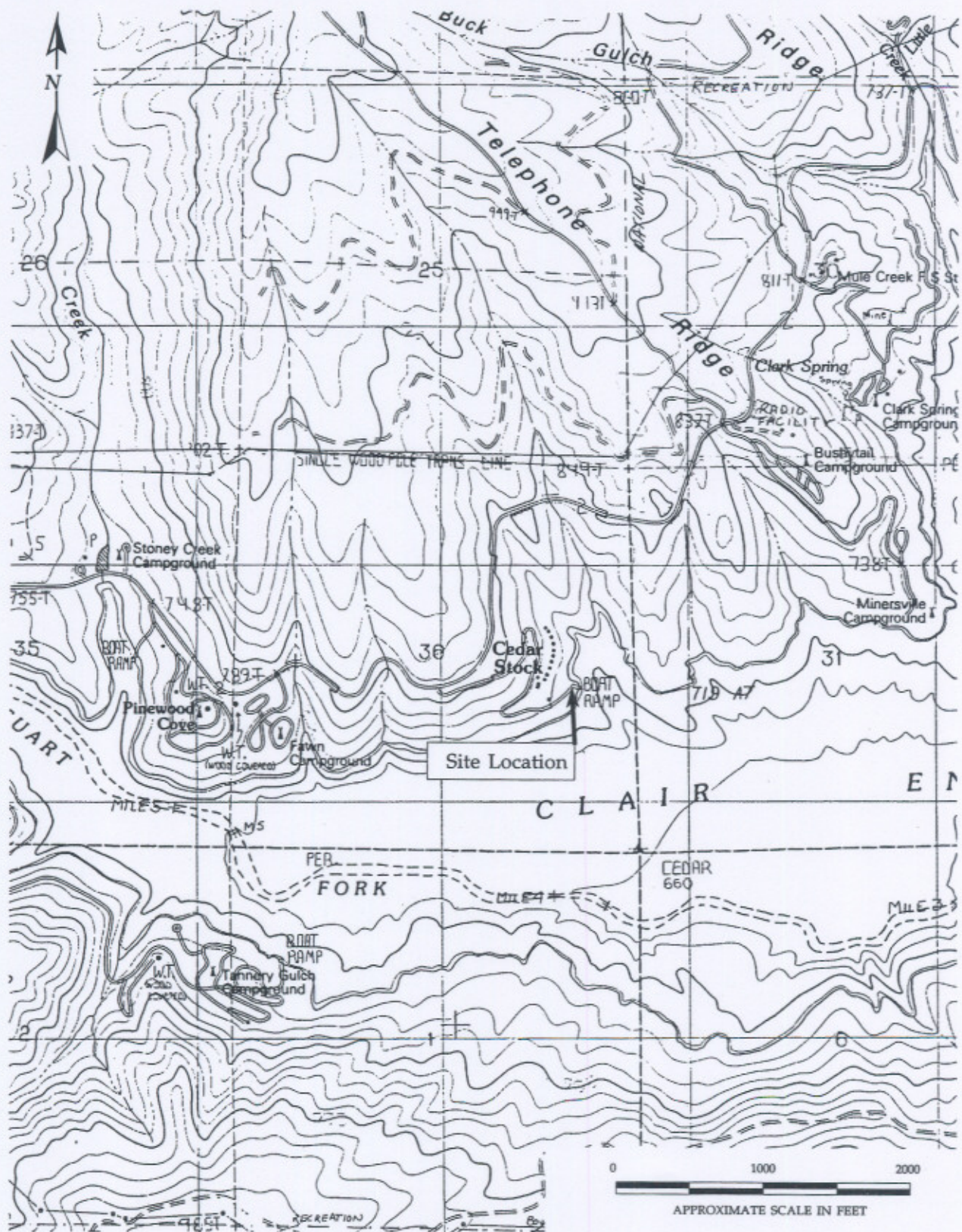
Well No.	Date	TPHg (µg/L)	MTBE (µg/L)	D.O.* (mg/L)	Eh* (mV)	pH*	Total Alkalinity (mg/L)	Nitrate (mg/L)	Ammonia (mg/L)	Sulfate (mg/L)	Ortho Phosphate (mg/L)	Ferrous Iron (mg/L)	TOC (mg/L)	COD (mg/L)	BOD (mg/L)	Heterotrophic Plate Count (CFU/mL)	Aerobic Hydrocarbon Degraders (CFU/mL)	Anaerobic Hydrocarbon Degraders (CFU/mL)
MW-4	12/15/03	<50	<0.5	1.72	195.1	6.08	--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	<50	1.30	1.69	208	6.77	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/04	<50	<0.5	1.54	--	6.30	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/04	<50	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/23/05	<50	<0.5	3.65	--	5.79	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/05	<50	<0.5	6.26	--	5.88	--	--	--	--	--	--	--	--	--	--	--	--
	3/22/06	<50	0.52	4.88	--	6.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	9/25/02	<50	<0.5	5.72	196	5.26	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/20/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/11/03	<50	<0.5	1.95	341	6.41	--	--	--	--	--	--	--	--	--	--	--	--
	9/24/03	<50	<0.5	1.77	293	6.42	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/03	Dry no sample					--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	<50	<0.5	1.83	207	6.74	--	--	--	--	--	--	--	--	--	--	--	--
	6/14/04	<50	<0.5	1.48	--	6.11	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/04	<50	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/23/05	<50	<0.5	4.10	--	6.14	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/05	<50	<0.5	6.29	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/22/06	<50	<0.5	6.20	--	6.32	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	9/25/02	<50	<0.5	4.11	204	5.50	160	0.65	0.15	2.20	<0.5	--	<1	<10	--	8,000	10,000	10,000
	12/12/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/20/03	<50	2.40	1.98	67	6.37	150	<0.5	0.18	3.40	<0.5	<0.1	<2	10	<3	1,000	4,500	2,500
	6/11/03	<50	1.60	1.92	199	6.38	150	0.72	0.12	2.80	<0.5	<0.1	3.6	<7	<3	5,000 / 1,000	800	2,000
	9/24/03	<50	1.50	1.87	253.3	6.55	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/03	No access					--	--	--	--	--	--	--	--	--	--	--	--
	3/4/04	No access					--	--	--	--	--	--	--	--	--	--	--	--
	6/14/04	<50	1.40	1.58	--	6.08	--	--	--	--	--	--	--	--	--	--	--	--
	12/15/04	<50	1.80	2.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/23/05	<50	1.00	3.85	--	5.97	--	--	--	--	--	--	--	--	--	--	--	--
	12/29/05	<50	1.30	5.34	--	5.79	--	--	--	--	--	--	--	--	--	--	--	--
	3/22/06	<50	0.99	6.02	--	6.61	--	--	--	--	--	--	--	--	--	--	--	--

Notes

TPHg Total petroleum hydrocarbons as gasoline by EPAM 5030/8260B
MTBE Methyl tert-butyl ether by EPA Method 8260B
µg/L micrograms per Liter, equivalent to parts per billion - ppb
mg/L milligrams per Liter, equivalent to parts per million - ppm
* Parameters measured in field and recorded on field sheets
mV Millivolts
CFU/mL Colony forming units per milliliter
D.O. Dissolved oxygen measured with downhole meter
Eh Reduction-oxidation potential measured with downhole meter
pH pH measured with field meter
Alkalinity by EPA Method 310.1
Nitrate by EPA Method 353.3
COD Chemical Oxygen Demand by EPA Method 410.4

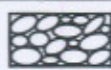
Ammonia by EPA Method 350.2
Sulfate by EPA Method 375.4
Phosphate by EPA Method 365.2
TOC Total Organic Carbon by EPA Method 415.2
Ferrous Iron by Standard Method 3500
BOD Biological Oxygen Demand by EPA Method 405.1
Heterotrophic Plate Count Bacteria enumeration assay by Standard Method 9215B modified
Hydrocarbon Degraders Bacteria enumeration assay for diesel and gasoline degraders
"--": Not analyzed, available, or applicable
"<###" Not detected above the number indicated

FIGURES



Site Location Map

Cedar Stock Resort
45810 State Highway 3
Trinity Center, CA

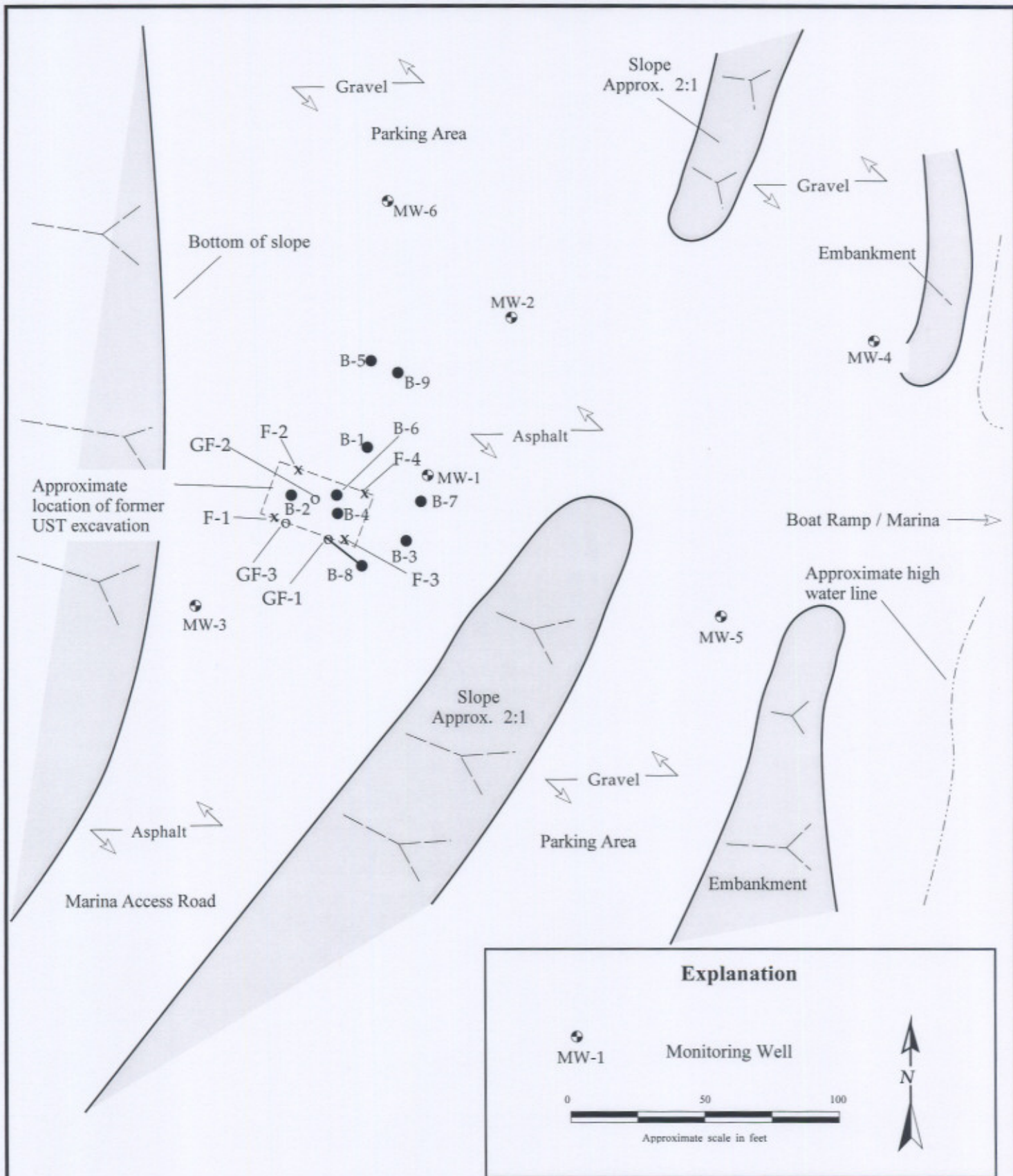


**BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-17

Report Date
4/06

Figure
1



Site Plan

Cedar Stock Resort
45810 State Highway 3
Trinity Center, California

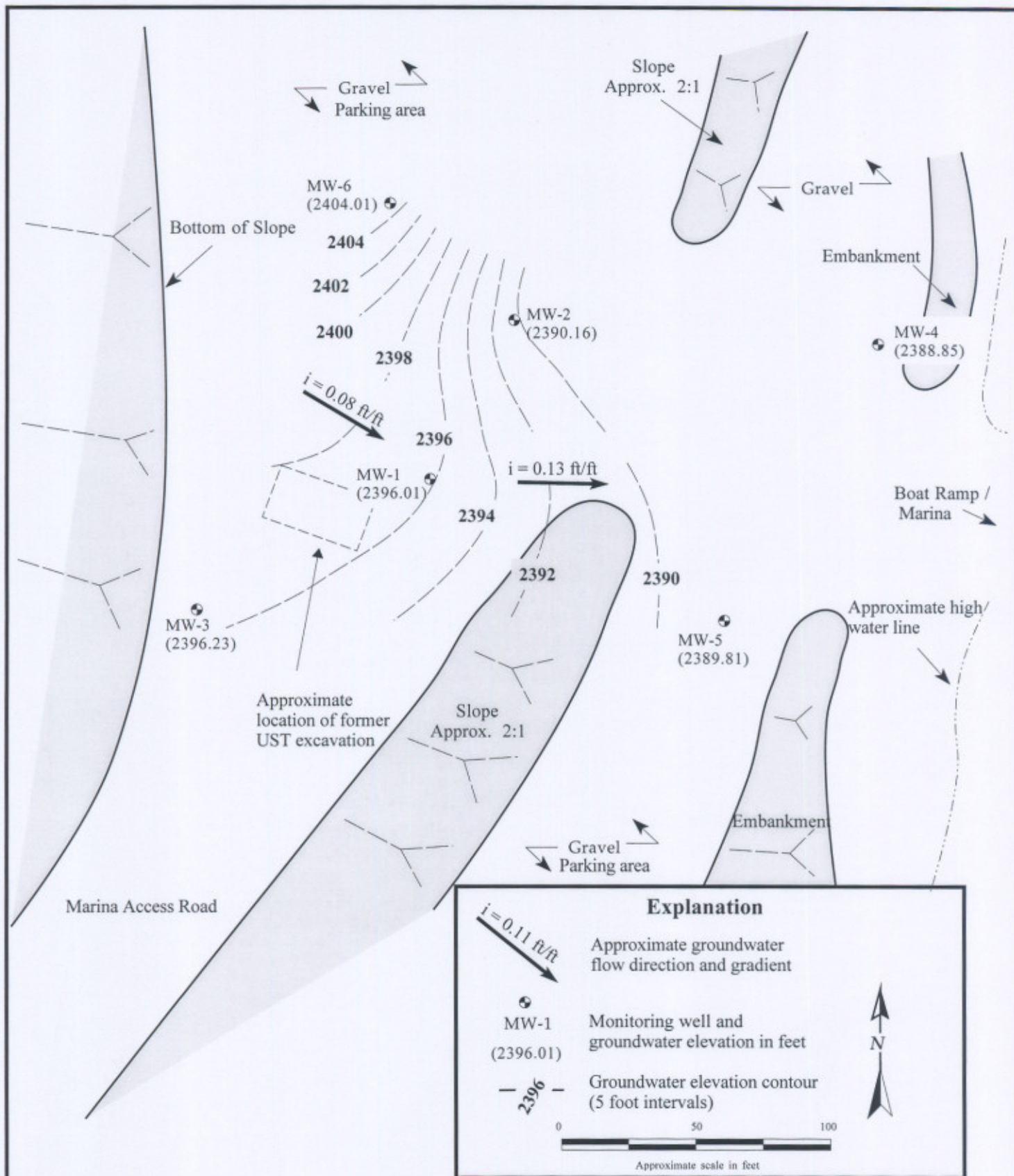


**BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-17

Report Date
4/06

Figure
2



Groundwater Elevations and Gradient

March 22, 2006

Cedar Stock Resort
45810 State Highway 3
Trinity Center, CA

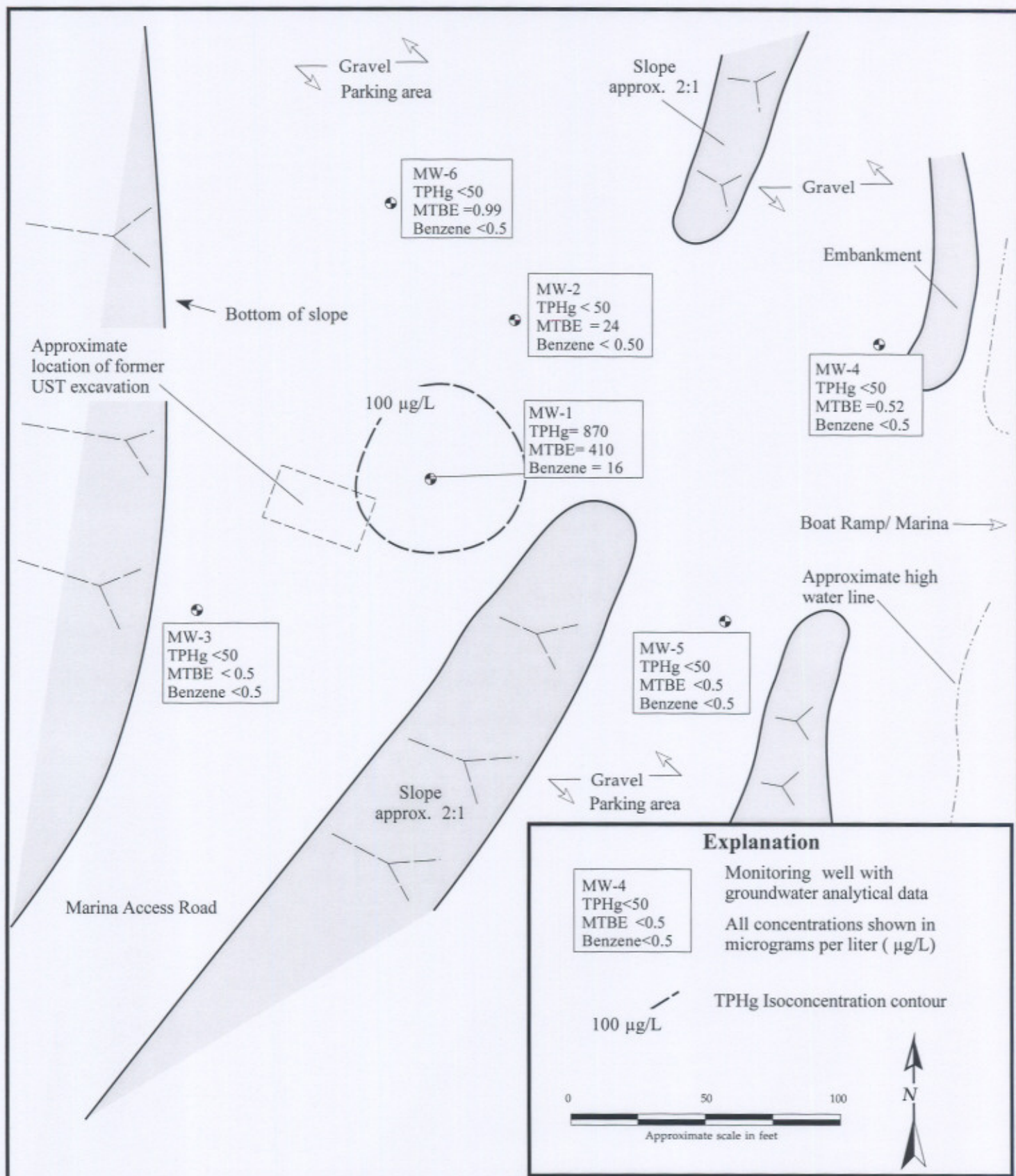


**BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-17

Report Date
4/06

Figure
3



Dissolved-Phase TPHg Distribution

March 22, 2006

Cedar Stock Resort
45810 State Highway 3
Trinity Center, CA

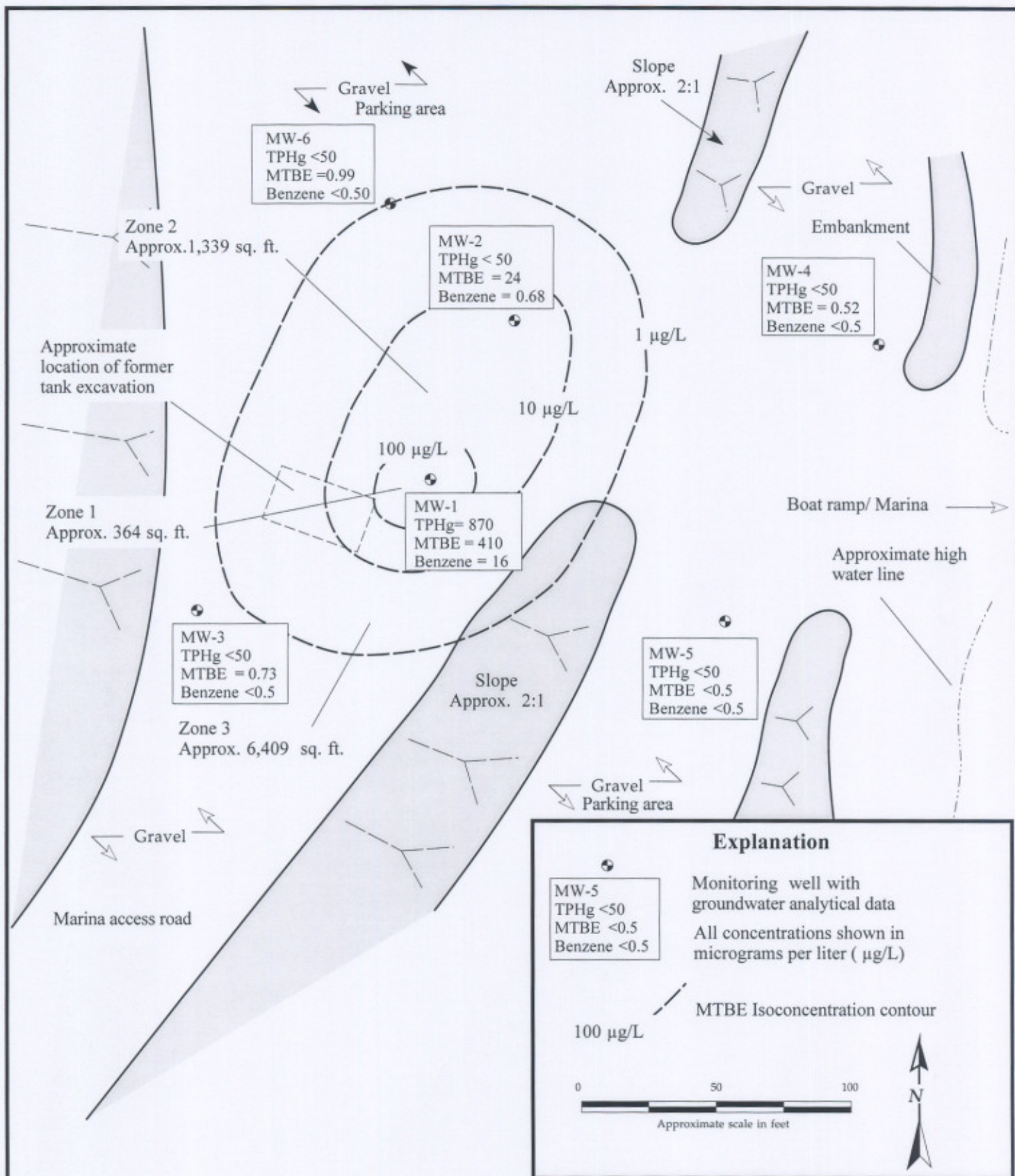


**BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-17

Report Date
4/06

Figure
4



Dissolved-Phase MTBE Distribution

March 22, 2006

Cedar Stock Resort
45810 State Highway 3
Trinity Center, CA

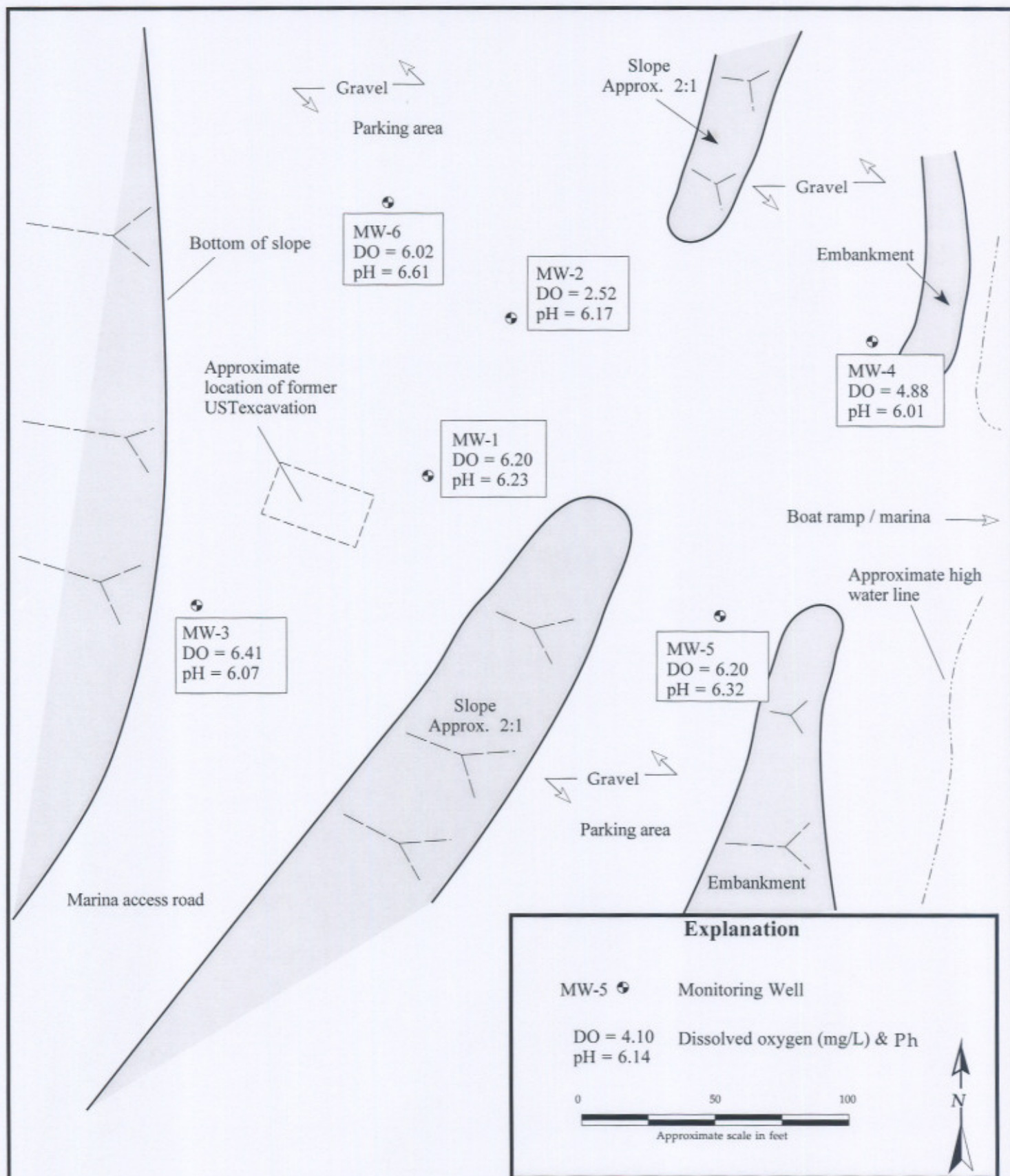


**BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-17

Report Date
4/06

Figure
5



Intrinsic Bioremediation Data

March 22, 2006

Cedar Stock Resort
45810 State Highway 3
Trinity Center, California



**BLUE ROCK
ENVIRONMENTAL, INC.**

Project No.
NC-17

Report Date
4/06

Figure
6

APPENDIX A

GAGING DATA/PURGE CALCULATIONS

Job No.: NC-17 Location: 45180 Hwy 3 Trinity ctr. Date: 3/22/06 Tech(s): JL

[illegible]

Explanation:

DIA. = Well Diameter

DTB = Depth to Bottom

DTW = Depth to Water

ST = Saturated Thickness (DTB-DTW)

CV = Casing Volume (ST x cf)

PV = Purge Volume (standard 3 x CV,
well development 10 x CV)

SPH = Thickness of Separate Phase Hydrocarbons

Conversion Factors (cf):

2 in. dia. well cf = 0.16 gal./ft.

4 in. dia. well cf = 0.65 gal./ft.

6 in. dia. well cf = 1.44 gal./ft.



BLUE ROCK
ENVIRONMENTAL, INC.

PURGING DATA

SHEET 1 OF 2

Job No.: NC-17 Location: 45180 Hwy 3 Date: 3/22/06 Tech: JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-1			---	---	---	Sample for:
Calc. purge	10:30	0.25	133	60.4	5.98	TPH_g TPH _d 8260
volume	10:35	3.25	173	60.1	6.16	BTEX MTBE Metals
6.87	10:40	6.85	176	59.7	6.23	Purging Method:
						<u>PVC bailer</u> / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
clear/mod/mod/no sheen/no odor						Dedicated / <u>Disposable bailer</u>

Sample at: 10:45

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-2			---	---	---	Sample for:
Calc. purge	10:10	0.25	157	59.4	5.95	TPH_g TPH _d 8260
volume	10:15	2.75	166	59.5	6.08	BTEX MTBE Metals
5.43	10:20	5.45	187	59.1	6.17	Purging Method:
						<u>PVC bailer</u> / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
clear/mod/mod/no sheen/no odor						Dedicated / <u>Disposable bailer</u>

Sample at: 10:25

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-3			---	---	---	Sample for:
Calc. purge	9:50	0.25	90	57.5	6.03	TPH_g TPH _d 8260
volume	9:55	2.50	82	57.4	6.07	BTEX MTBE Metals
4.83	10:00	4.85	79	57.4	6.07	Purging Method:
						<u>PVC bailer</u> / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
clear/mod/mod/no sheen/no odor						Dedicated / <u>Disposable bailer</u>

Sample at: 10:05

PURGING DATA

SHEET 2 OF 2

Job No.: NC-17 Location: 45180 Hwy 3 Date: 3/22/06 Tech: JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-4			---	---	---	Sample for:
Calc. purge	10:50	0.25	90	59.0	5.99	TPHg TPHd 8260
volume	10:55	4.50	87	58.6	5.98	BTEX MTBE Metals
8.85	11:00	8.85	85	58.7	6.01	Purging Method:
						(PVC bailer) / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
clear/mod/mod/sheen/no odor						Dedicated / Disposable bailer

Sample at: 11:05

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-5			---	---	---	Sample for:
Calc. purge	11:10	0.25	117	59.4	6.31	TPHg TPHd 8260
volume	11:15	1.75	117	59.9	6.29	BTEX MTBE Metals
3.27	11:20	3.25	119	59.5	6.32	Purging Method:
						(PVC bailer) / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
clear/mod/mod/sheen/no odor						Dedicated / Disposable bailer

Sample at: 11:25

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
MW-6			---	---	---	Sample for:
Calc. purge	11:30	0.25	201	54.2	6.61	TPHg TPHd 8260
volume	11:35	3.00	200	56.4	6.57	BTEX MTBE Metals
9.78	11:40	6.00	206	57.5	6.52	Purging Method:
	11:45	9.75	233	57.5	6.61	(PVC bailer) / Pump
COMMENTS: color, turbidity, recharge, sheen						Sampling Method:
clear/mod/mod/sheen/no odor						Dedicated / Disposable bailer

Sample at: 11:50

APPENDIX B



Report Number : 49130

Date : 3/29/2006

Andrew LoCicero
Blue Rock Environmental, Inc.
535 3rd Street, Suite 100
Eureka, CA 95501

Subject : 6 Water Samples
Project Name : Cedar Stock
Project Number : NC - 17

Dear Mr. LoCicero,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 49130

Date : 3/29/2006

Project Name : Cedar Stock

Project Number : NC - 17

Sample : MW-1

Matrix : Water

Lab Number : 49130-01

Sample Date : 3/22/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	16	0.50	ug/L	EPA 8260B	3/28/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Methyl-t-butyl ether (MTBE)	410	0.90	ug/L	EPA 8260B	3/29/2006
TPH as Gasoline	870	50	ug/L	EPA 8260B	3/28/2006
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	3/28/2006
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	3/28/2006

Sample : MW-2

Matrix : Water

Lab Number : 49130-02

Sample Date : 3/22/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.68	0.50	ug/L	EPA 8260B	3/27/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Methyl-t-butyl ether (MTBE)	24	0.50	ug/L	EPA 8260B	3/27/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/27/2006
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	3/27/2006
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/27/2006

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 49130

Date : 3/29/2006

Project Name : Cedar Stock

Project Number : NC - 17

Sample : MW-3

Matrix : Water

Lab Number : 49130-03

Sample Date : 3/22/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/28/2006
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	3/28/2006
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	3/28/2006

Sample : MW-4

Matrix : Water

Lab Number : 49130-04

Sample Date : 3/22/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Methyl-t-butyl ether (MTBE)	0.52	0.50	ug/L	EPA 8260B	3/28/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/28/2006
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	3/28/2006
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	3/28/2006

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 49130

Date : 3/29/2006

Project Name : Cedar Stock

Project Number : NC - 17

Sample : MW-5

Matrix : Water

Lab Number : 49130-05

Sample Date : 3/22/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/28/2006
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	3/28/2006
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	3/28/2006

Sample : MW-6

Matrix : Water

Lab Number : 49130-06

Sample Date : 3/22/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Methyl-t-butyl ether (MTBE)	0.99	0.50	ug/L	EPA 8260B	3/28/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/28/2006
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	3/28/2006
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	3/28/2006

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

QC Report : Method Blank Data

Project Name : Cedar Stock

Project Number : NC - 17

Report Number : 49130

Date : 3/29/2006

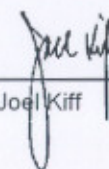
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/27/2006
Toluene - d8 (Surr)	99.8		%	EPA 8260B	3/27/2006
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	3/27/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/27/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/27/2006
Toluene - d8 (Surr)	102		%	EPA 8260B	3/27/2006
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	3/27/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/28/2006
Toluene - d8 (Surr)	101		%	EPA 8260B	3/28/2006
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	3/28/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/28/2006

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 49130

Date : 3/29/2006

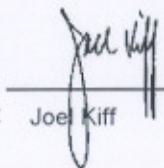
Project Name : Cedar Stock

Project Number : NC - 17

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	49130-02	0.68	40.0	40.0	35.4	35.0	ug/L	EPA 8260B	3/27/06	86.9	85.9	1.19	70-130	25
Toluene	49130-02	<0.50	40.0	40.0	35.4	34.5	ug/L	EPA 8260B	3/27/06	88.5	86.3	2.47	70-130	25
Tert-Butanol	49130-02	<5.0	200	200	183	188	ug/L	EPA 8260B	3/27/06	91.3	94.0	2.92	70-130	25
Methyl-t-Butyl Ether	49130-02	24	40.0	40.0	62.9	63.0	ug/L	EPA 8260B	3/27/06	98.4	98.6	0.204	70-130	25
Benzene	49148-01	27	40.0	40.0	58.9	57.1	ug/L	EPA 8260B	3/27/06	80.6	76.0	5.78	70-130	25
Toluene	49148-01	4.0	40.0	40.0	38.3	37.9	ug/L	EPA 8260B	3/27/06	85.8	84.9	1.08	70-130	25
Tert-Butanol	49148-01	<5.0	200	200	190	189	ug/L	EPA 8260B	3/27/06	95.1	94.7	0.398	70-130	25
Methyl-t-Butyl Ether	49148-01	<0.50	40.0	40.0	36.6	36.6	ug/L	EPA 8260B	3/27/06	91.6	91.6	0.0465	70-130	25
Benzene	49141-06	<0.50	40.0	40.0	31.9	31.6	ug/L	EPA 8260B	3/28/06	79.7	79.0	0.841	70-130	25
Toluene	49141-06	<0.50	40.0	40.0	32.8	32.4	ug/L	EPA 8260B	3/28/06	82.1	81.0	1.38	70-130	25
Tert-Butanol	49141-06	<5.0	200	200	174	178	ug/L	EPA 8260B	3/28/06	86.8	88.8	2.29	70-130	25
Methyl-t-Butyl Ether	49141-06	300	40.0	40.0	337	333	ug/L	EPA 8260B	3/28/06	103	94.7	8.70	70-130	25
Benzene	49161-03	<0.50	40.0	40.0	40.4	39.1	ug/L	EPA 8260B	3/28/06	101	97.8	3.19	70-130	25
Toluene	49161-03	<0.50	40.0	40.0	40.5	39.1	ug/L	EPA 8260B	3/28/06	101	97.8	3.38	70-130	25
Tert-Butanol	49161-03	<5.0	200	200	206	208	ug/L	EPA 8260B	3/28/06	103	104	1.07	70-130	25
Methyl-t-Butyl Ether	49161-03	2.2	40.0	40.0	39.5	39.9	ug/L	EPA 8260B	3/28/06	93.2	94.3	1.21	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 49130

Date : 3/29/2006

Project Name : Cedar Stock

Project Number : NC - 17

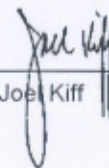
Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	3/27/06	93.0	70-130
Toluene	40.0	ug/L	EPA 8260B	3/27/06	96.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/27/06	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/27/06	104	70-130
Benzene	40.0	ug/L	EPA 8260B	3/27/06	92.8	70-130
Toluene	40.0	ug/L	EPA 8260B	3/27/06	95.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/27/06	99.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/27/06	102	70-130
Benzene	40.0	ug/L	EPA 8260B	3/28/06	92.7	70-130
Toluene	40.0	ug/L	EPA 8260B	3/28/06	94.9	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/28/06	97.7	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/28/06	103	70-130
Benzene	40.0	ug/L	EPA 8260B	3/28/06	97.6	70-130
Toluene	40.0	ug/L	EPA 8260B	3/28/06	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/28/06	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/28/06	95.1	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joe Kiff



Project Contract (Hardcopy or PDF To): Andrew Lobicero		California EDF Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Chain-of-Custody Record and Analysis Request																											
Company / Address: Blue Rock Env. Inc. 535 3rd St. Ste. 100 Eureka, CA		Sampling Company Log Code:		Analysis Request												TAT															
Phone #: (707) 441-1934	Fax #: (707) 441-1949	Global ID: T0601500024														<input type="checkbox"/> 12 hr															
Project #: NC-17	P.O. #:	EDF Deliverable To (Email Address): Andrew@bluerockenv.com														<input type="checkbox"/> 24 hr															
Project Name: Cedar Stock		Sampler Signature: James Linderman														<input type="checkbox"/> 48 hr															
Project Address: 45180 Hwy. 3 Trinity Center, CA		Sampling		Container		Preservative		Matrix														<input type="checkbox"/> 72 hr									
Sample Designation		Date	Time	40 ml VOA	Sieve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil	Air	MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)	W.E.T. Lead (STLC)	<input checked="" type="checkbox"/> 1 wk		
MW-1	3/22/06	1045	2						X			X				X	X	X												X	01
MW-2		1025	3						X			X				X	X	X												X	02
MW-3		1005	3						X			X				X	X	X												X	03
MW-4		1105	3						X			X				X	X	X												X	04
MW-5		1125	3						X			X				X	X	X												X	05
MW-6		1150	3						X			X				X	X	X												X	06
Relinquished by: James Linderman		Date: 3/23/06	Time:	Received by: Fed Ex		Remarks:																									
Relinquished by:		Date:	Time:	Received by:		Bill to:																									
Relinquished by:		Date:	Time:	Received by Laboratory:		For Lab Use Only: Sample Receipt																									
		Date: 032406	Time: 1112	2nd W 74 - Jeff Anderson		Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present																				
						3	LT	032406	1112	FW-4	(Yes)																				

APPENDIX C

First-Order Decay Rates of Dissolved-Phase Concentrations 1/00 - 3/06
Cedar Stock Resort, Trinity Center, CA

Well	TPHg (%/day)	Benzene (%/day)	MTBE (%/day)
MW-1	-0.10	-0.27	-0.07
MW-2	-0.13	-0.17	-0.17

First-Order Decay Rates of Dissolved-Phase Mass 3Q03 - 1Q06
Cedar Stock Resort, Trinity Center, CA

TPHg (%/day)	MTBE (%/day)
-0.15	-0.29

See attached decay rate graphs

Chart 1a
MW-1: Dissolved TPHg vs. Time
Cedar Stock Resort
41580 State Hwy 3
Trinity Center, CA

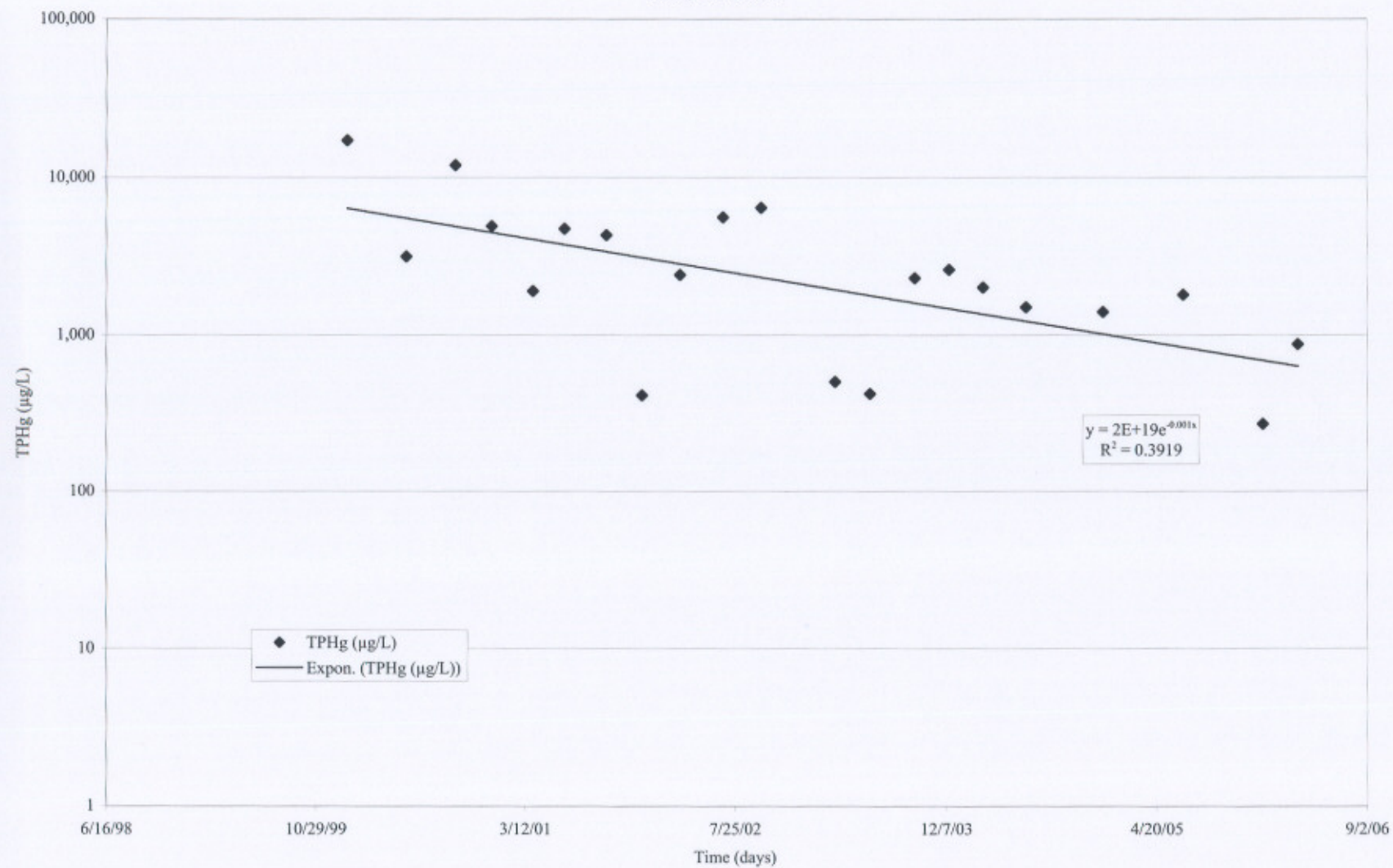


Chart 1b
MW-1: Dissolved Benzene vs. Time
Cedar Stock Resort
41580 State Hwy 3
Trinity Center, CA

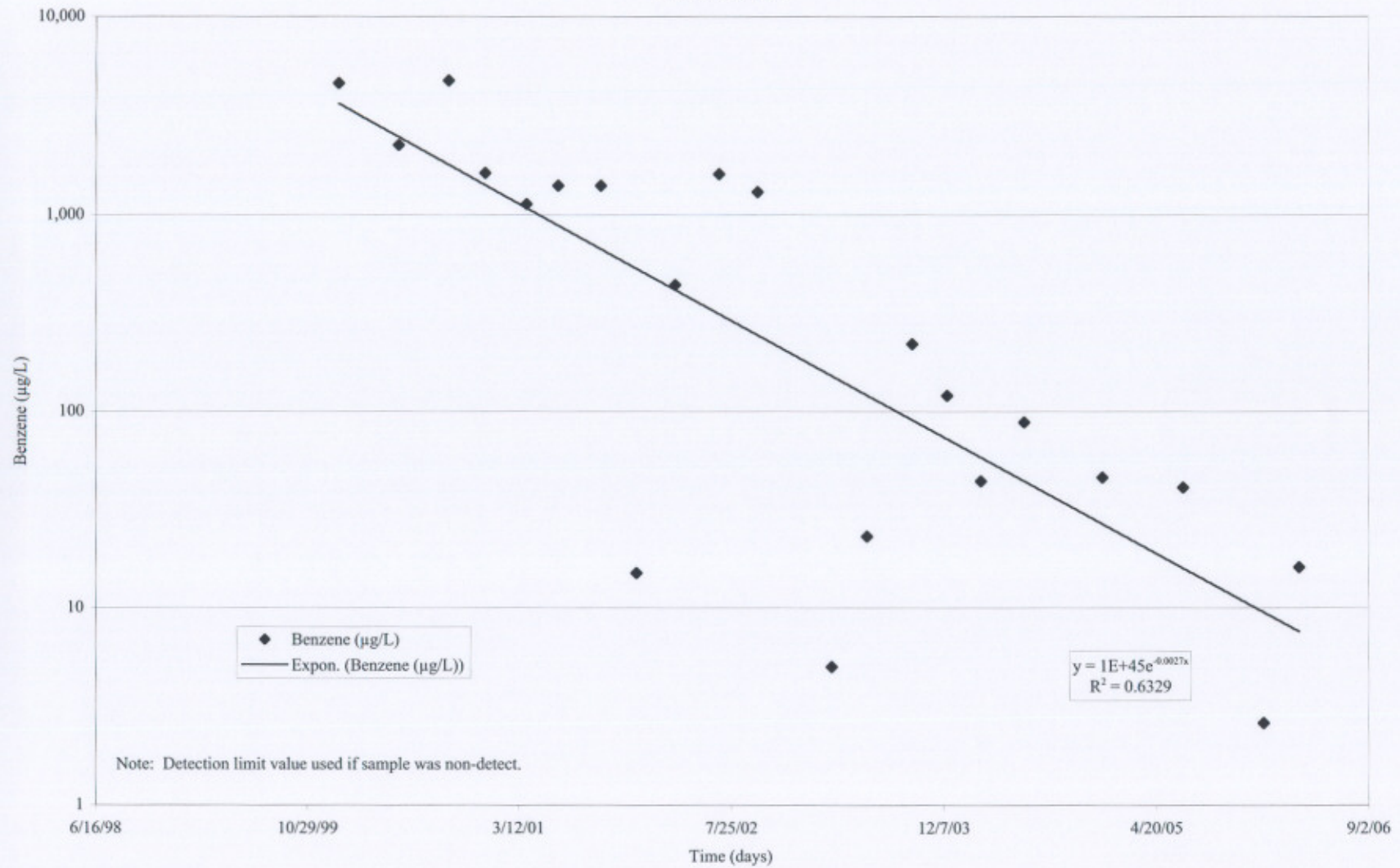


Chart 1c
MW-1: Dissolved MTBE vs. Time
Cedar Stock Resort
41580 State Hwy 3
Trinity Center, CA

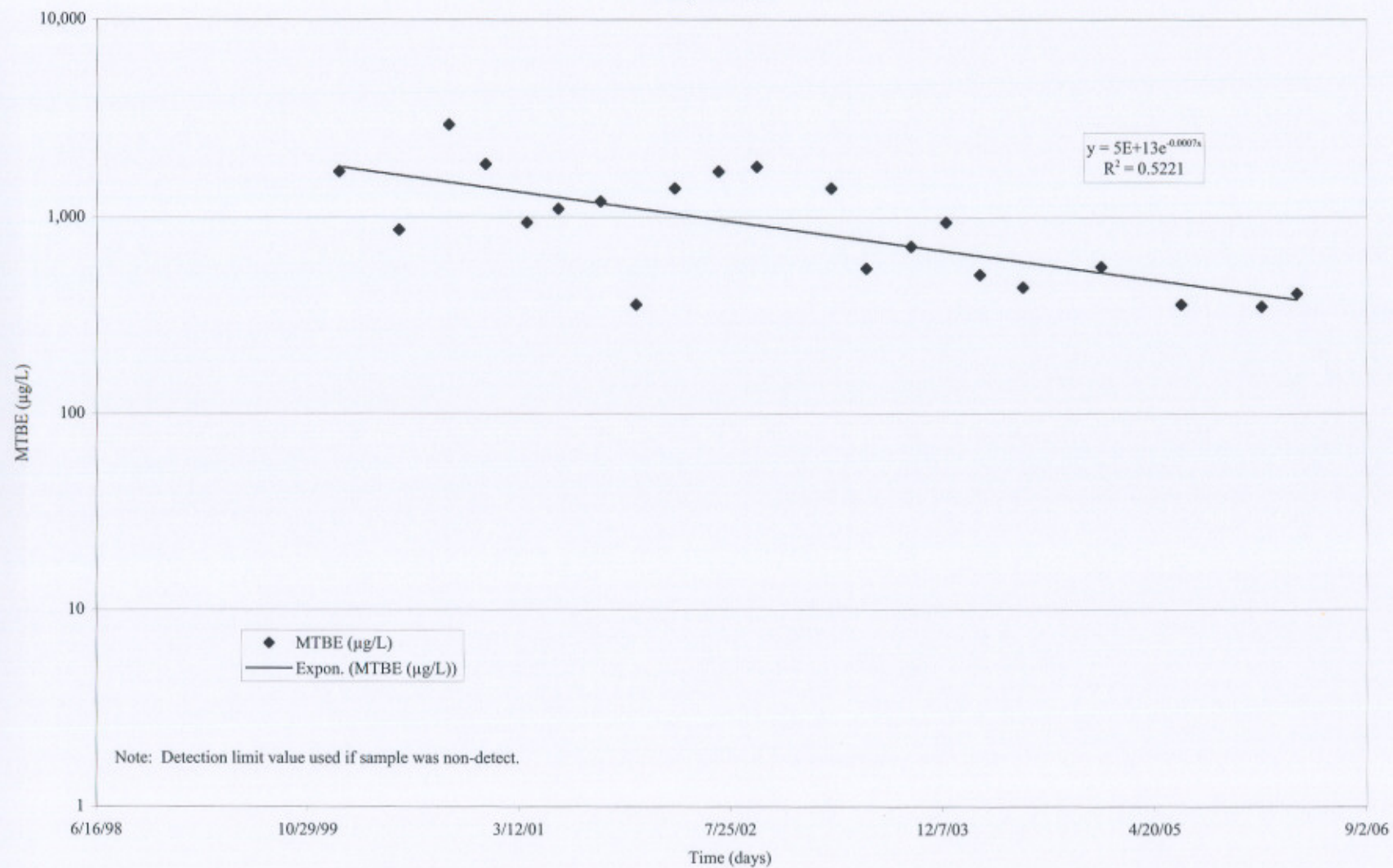


Chart 2a
MW-2: Dissolved TPHg vs. Time
Cedar Stock Resort
45810 State Hwy 3
Trinity Center, CA

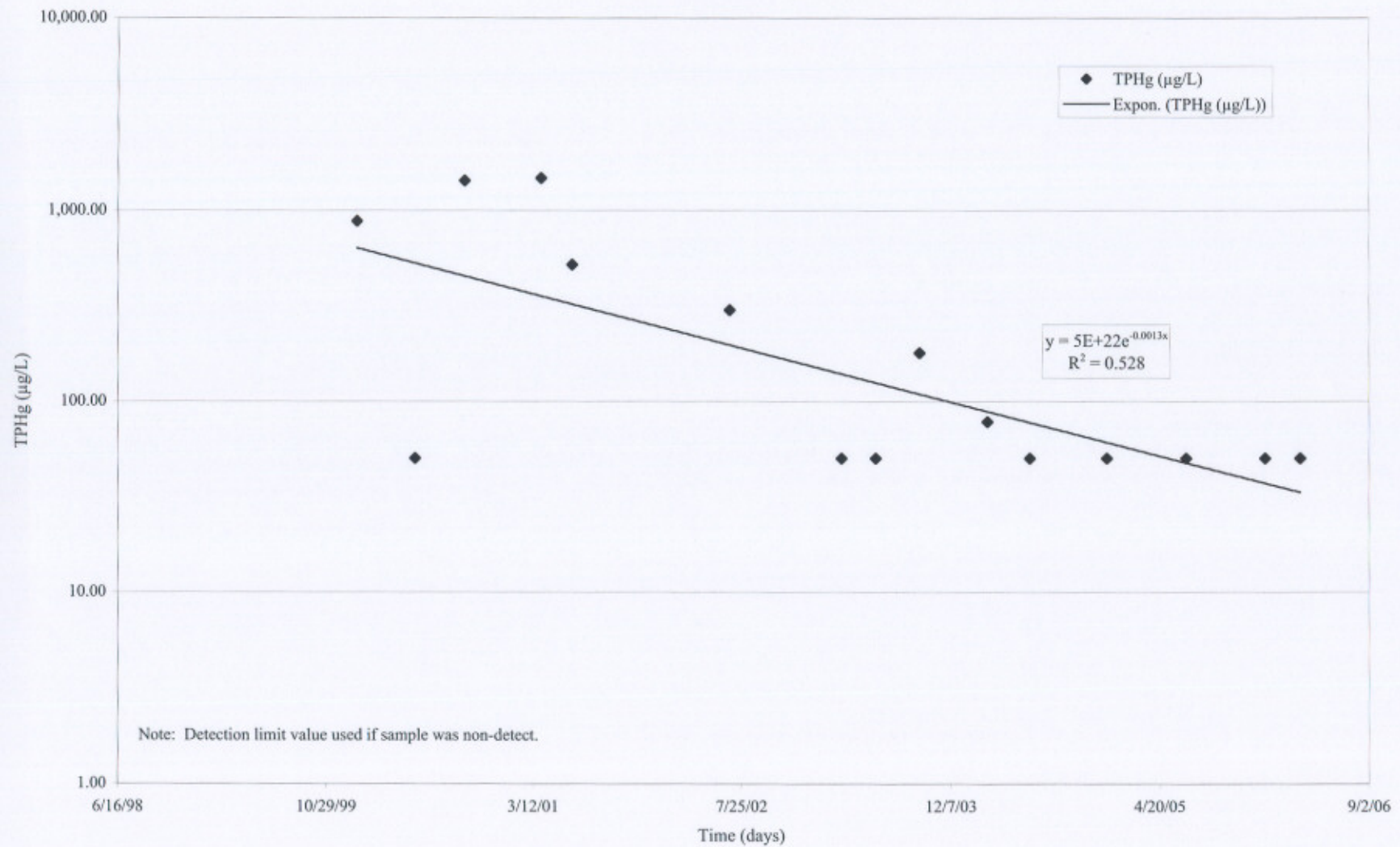


Chart 2b
MW-2: Dissolved Benzene vs. Time
Cedar Stock Resort
45810 State Hwy 3
Trinity Center, CA

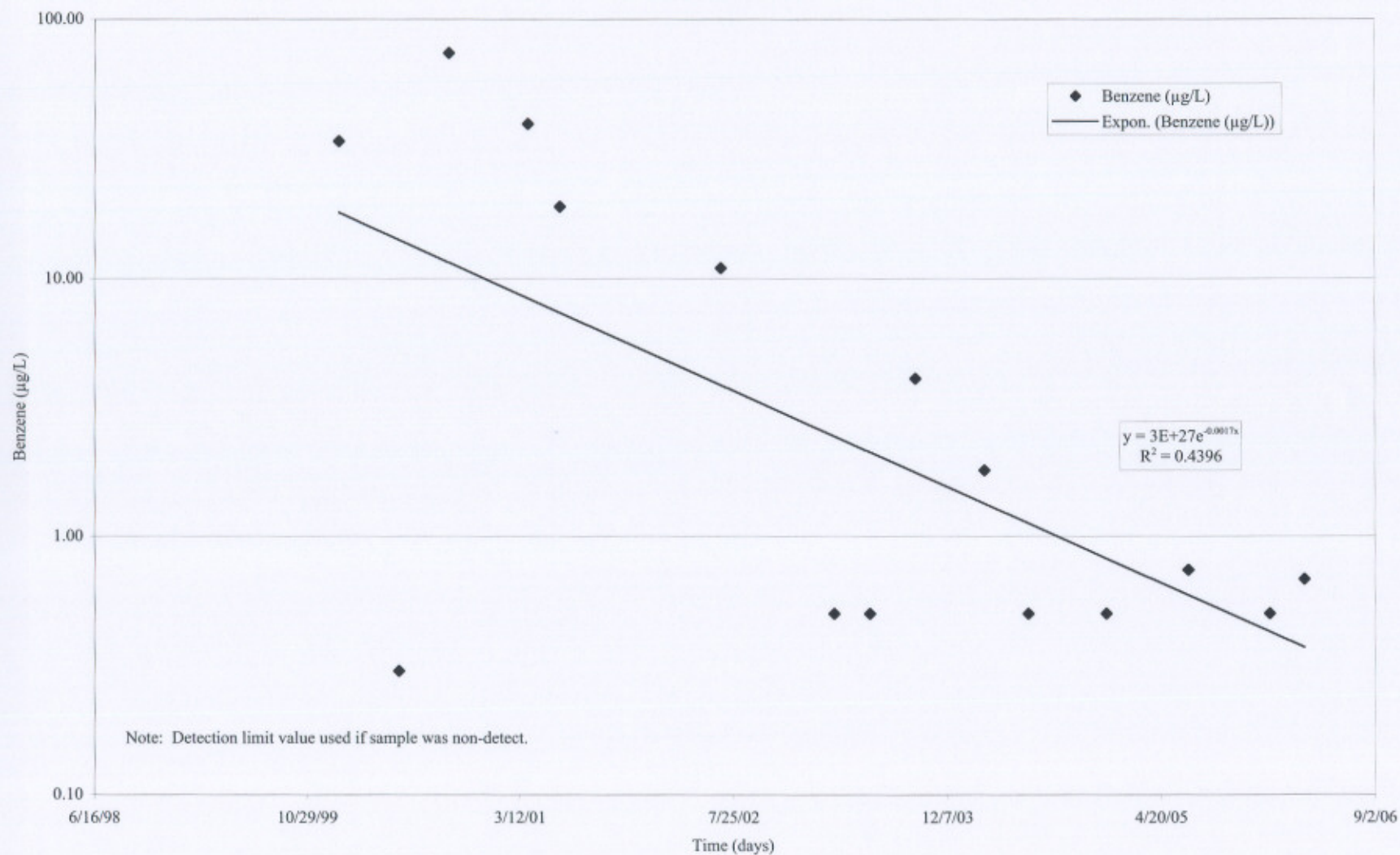
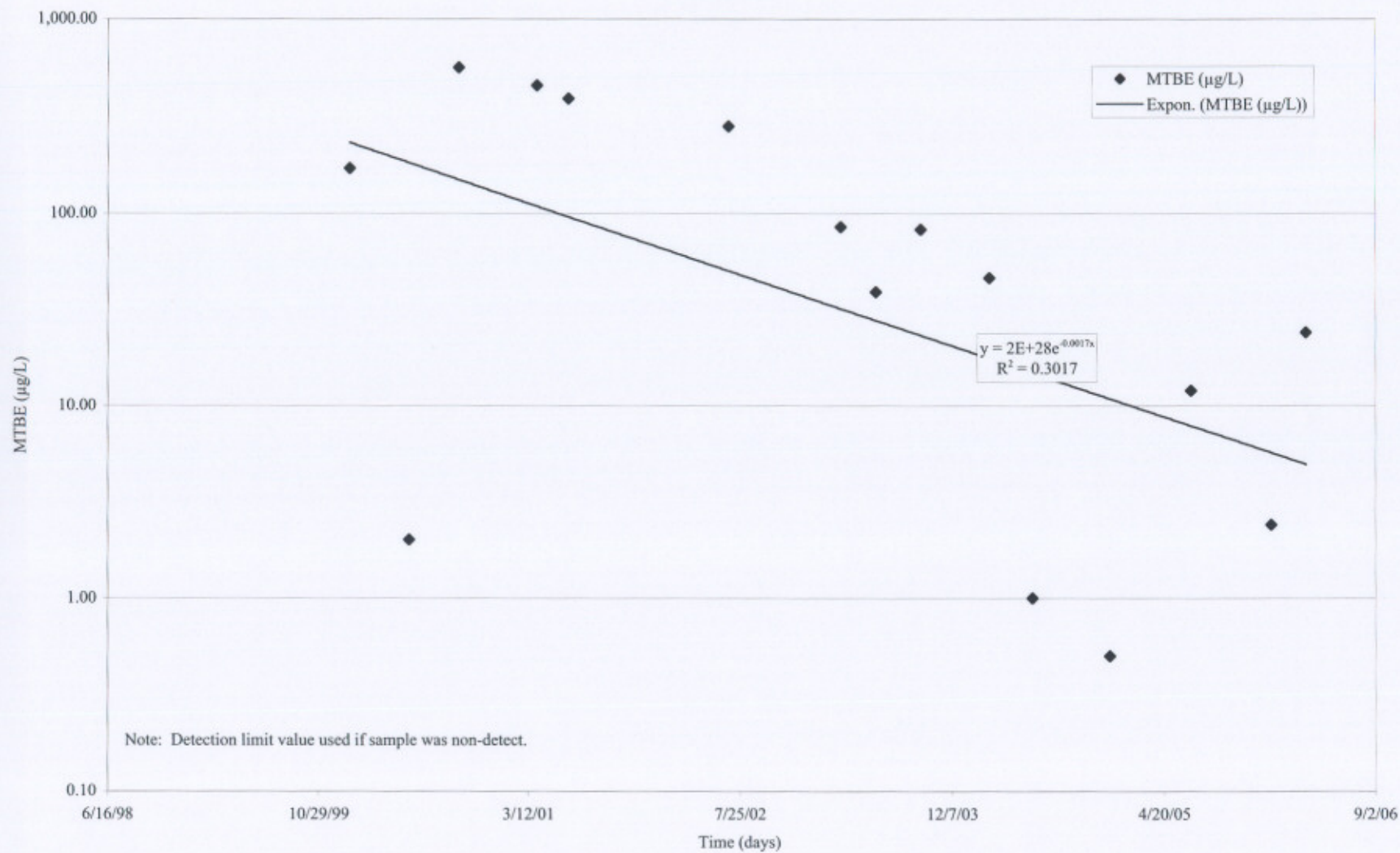


Chart 2c
MW-2: Dissolved MTBE vs. Time
Cedar Stock Resort
45810 State Hwy 3
Trinity Center, CA



APPENDIX D

Chart 3
Dissolved-Phase TPHg Mass vs. Time
Cedar Stock Resort
45180 State Hwy. 3
Trinity Center, CA

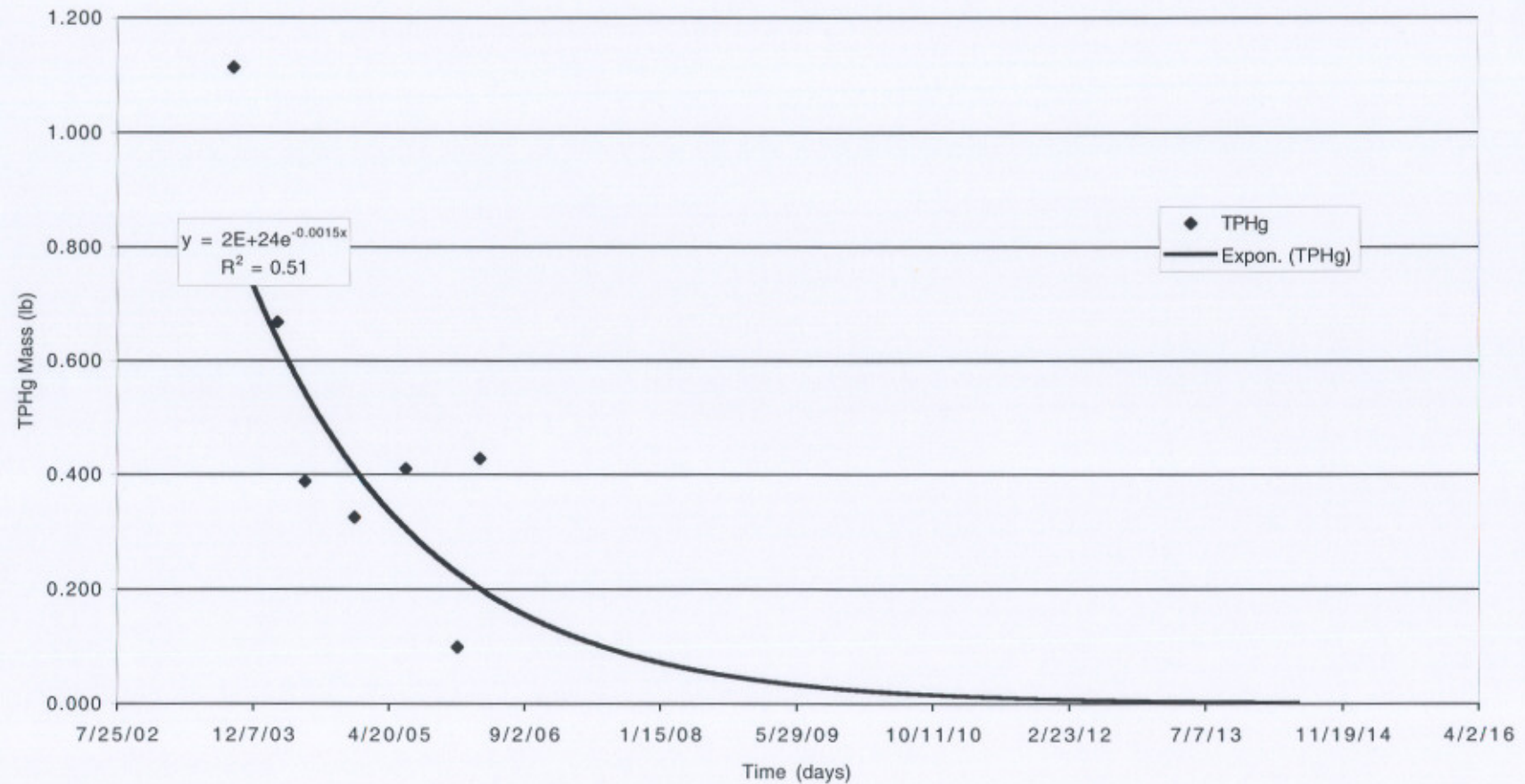
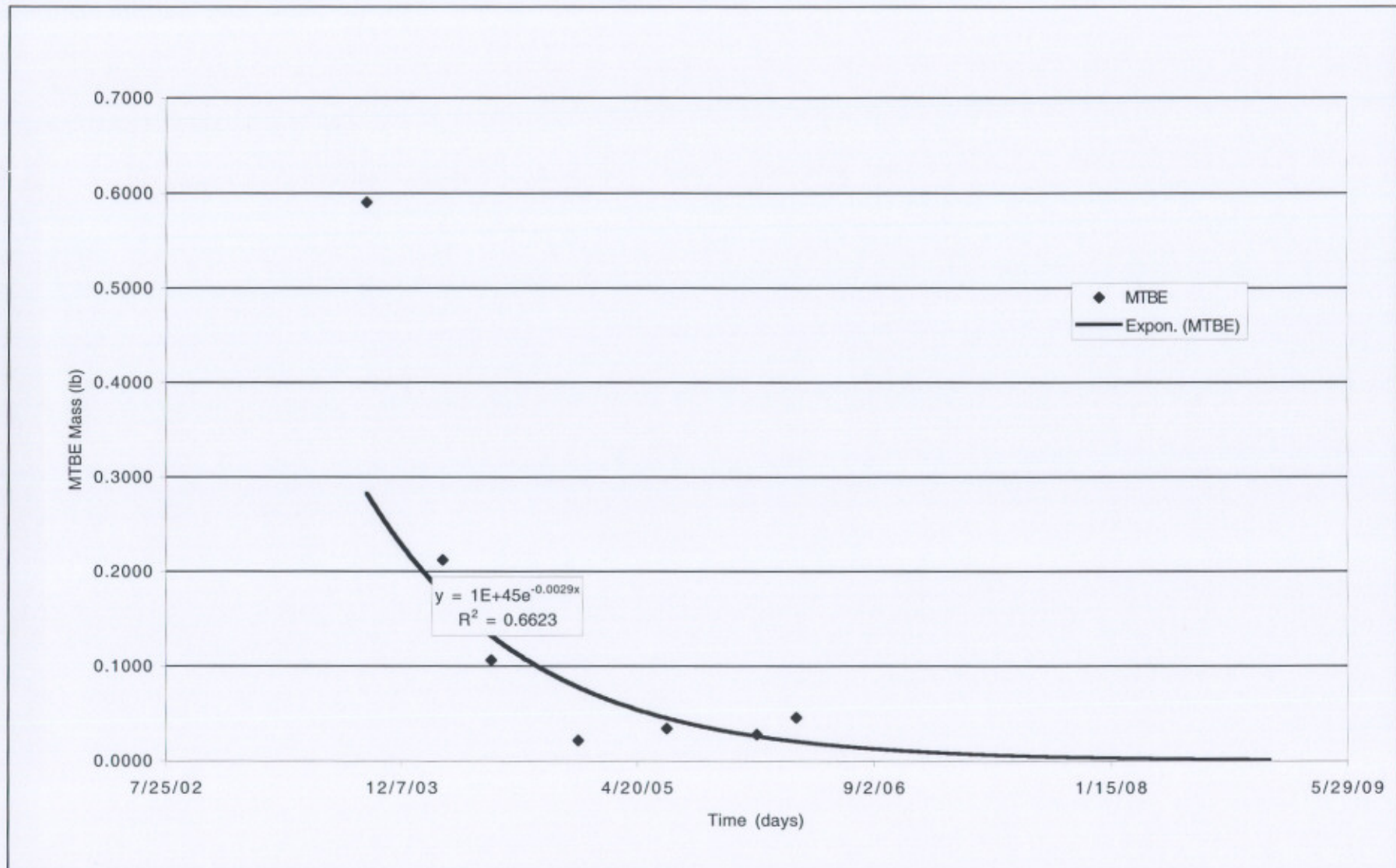


Chart 4
Dissolved-Phase MTBE Mass vs. Time
Cedar Stock Resort
45180 State Hwy. 3
Trinity Center, CA



Calculation of Residual Dissolved-Phase Contaminant Mass September 2003

Cedar Stock Resort, Trinity Center, CA

Project # NC-17

Residual TPHg

Zone 1

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
1.900	842	20	0.35	5,894	11,199	0.697
Total TPHg (lb)						0.697
Total TPHg (gals)						0.11

Zone 2

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
0.320	2,988	20	0.35	20,916	6,693	0.417
Total TPHg (lb)						0.417
Total TPHg (gals)						0.07
Total TPHg (lb.)						1.11
Total TPHg (gal.)						0.18

Residual MTBE

Zone 1

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.405	2,856	20	0.35	19,992	8,096.8	0.50428
Total MTBE (lb)						0.50428
Total MTBE (gals)						0.0827

Zone 2

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.0320	5,388	20	0.35	37,716	1,206.9	0.07517
Total MTBE (lb)						0.07517
Total MTBE (gals)						0.0123

Calculation of Residual Dissolved-Phase Contaminant Mass September 2003

Cedar Stock Resort, Trinity Center, CA

Project # NC-17

Zone 3

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.00320	8,077	20	0.35	56,539	180.9	0.01127
Total MTBE (lb)						0.01127
Total MTBE (gals)						0.0018
Total MTBE (lb.)						0.5907
Total MTBE (gal.)						0.0968

A = Area

h = thickness

V = volume = A * h

n = soil porosity (assume 35%)

TPHg mass = V (ft³) * Mean TPH conc. (unitless)

MTBE mass = V (ft³) * Mean TPH conc. (unitless)

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = methyl terterary butyl ether

lb = pound

mg/L = milligrams per liter

gal. = gallons

ft. = foot

Calculation of Residual Dissolved-Phase Contaminant Mass March 2004

Cedar Stock Resort, Trinity Center, CA

Project # NC-17

Residual TPHg

Zone 1

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
---------------------	-------------------------	-----------	---	-------------------------	--------------------------------------	-------------------

2.000	480	20	0.35	3,360	6,720	0.419
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Total TPHg (lb)						0.419
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Total TPHg (gals)						0.07
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Zone 2

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
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0.320	1,784	20	0.35	12,488	3,996	0.249
-------	-------	----	------	--------	-------	-------

Total TPHg (lb)						0.249
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Total TPHg (gals)						0.04
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Total TPHg (lb)						0.67
-----------------	--	--	--	--	--	------

Total TPHg (gals)						0.11
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Residual MTBE

Zone 1

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
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0.510	774	20	0.35	5,418	2,763.2	0.17210
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Total MTBE (lb)						0.17210
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Total MTBE (gals)						0.0282
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Zone 2

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
---------------------	-------------------------	-----------	---	-------------------------	--------------------------------------	-------------------

0.0320	2,171	20	0.35	15,197	486.3	0.03029
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Total MTBE (lb)						0.03029
-----------------	--	--	--	--	--	---------

Total MTBE (gals)						0.0050
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Calculation of Residual Dissolved-Phase Contaminant Mass March 2004

Cedar Stock Resort, Trinity Center, CA

Project # NC-17

Zone 3

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.00320	6,897	20	0.35	48,279	154.5	0.00962

Total MTBE (lb)	0.00962
-----------------	---------

Total MTBE (gals)	0.0016
-------------------	--------

Total MTBE (lb)	0.2120
-----------------	--------

Total MTBE (gals)	0.0348
-------------------	--------

A = Area

h = thickness

V = volume = A * h

n = soil porosity (assume 35%)

TPHg mass = V (ft³) * Mean TPH conc. (unitless)

MTBE mass = V (ft³) * Mean TPH conc. (unitless)

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary butyl ether

lb = pound

mg/L = milligrams per liter

gal. = gallons

ft. = foot

Calculation of Residual Dissolved-Phase Contaminant Mass June 2004

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Residual TPHg

Zone 1

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
1.500	291	20	0.35	2,037	3,056	0.190
Total TPHg (lb)						0.190
Total TPHg (gals)						0.03

Zone 2

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
0.320	1,423	20	0.35	9,961	3,188	0.199
Total TPHg (lb)						0.199
Total TPHg (gals)						0.03
Total TPHg (lb)						0.39
Total TPHg (gals)						0.06

Residual MTBE

Zone 1

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.440	429	20	0.35	3,003	1,321.3	0.08229
Total MTBE (lb)						0.08229
Total MTBE (gals)						0.0135

Zone 2

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.0320	1,247	20	0.35	8,729	279.3	0.01740
Total MTBE (lb)						0.01740
Total MTBE (gals)						0.0029

Calculation of Residual Dissolved-Phase Contaminant Mass June 2004

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Zone 3

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.00320	4,560	20	0.35	31,920	102.1	0.00636

Total MTBE (lb)	0.00636
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Total MTBE (gals)	0.0010
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Total MTBE (lb)	0.1061
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Total MTBE (gals)	0.0174
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A = Area

h = thickness

V = volume = A * h

n = soil porosity (assume 35%)

TPHg mass = V (ft³) * Mean TPH conc. (unitless)

MTBE mass = V (ft³) * Mean TPH conc. (unitless)

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = methyl terterary butyl ether

lb = pound

mg/L = milligrams per liter

gal. = gallons

ft. = foot

Calculation of Residual Dissolved-Phase Contaminant Mass December 2004

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Residual TPHg

Zone 1

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
1.400	267	20	0.35	1,869	2,617	0.163
Total TPHg (lb)						0.163
Total TPHg (gals)						0.027

Zone 2

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
0.320	1,166	20	0.35	8,162	2,612	0.163
Total TPHg (lb)						0.163
Total TPHg (gals)						0.027
Total TPHg (lb.)						0.33
Total TPHg (gal.)						0.0534

Residual MTBE

Zone 1

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.560	429	20	0.35	3,003	1,681.7	0.10474
Total MTBE (lb)						0.10474
Total MTBE (gals)						0.0172

Zone 2

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.0320	1,124	20	0.35	7,868	251.8	0.01568
Total MTBE (lb)						0.01568
Total MTBE (gals)						0.0026

Calculation of Residual Dissolved-Phase Contaminant Mass December 2004

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Zone 3

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.00320	4,240	20	0.35	29,680	95.0	0.00592

Total MTBE (lb)	0.00592
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Total MTBE (gals)	0.0010
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Total MTBE (lb.)	0.022
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Total MTBE (gal.)	0.0035
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A = Area

h = thickness

V = volume = A * h

n = soil porosity (assume 35%)

TPHg mass = V (ft³) * Mean TPH conc. (unitless)

MTBE mass = V (ft³) * Mean TPH conc. (unitless)

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = methyl terterary butyl ether

lb = pound

mg/L = milligrams per liter

gal. = gallons

ft. = foot

Calculation of Residual Dissolved-Phase Contaminant Mass June 2005

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Residual TPHg

Zone 1

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
1.800	267	20	0.35	1,869	3,364	0.210
Total TPHg (lb)						0.210
Total TPHg (gals)						0.034

Zone 2

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
0.320	1,433	20	0.35	10,031	3,210	0.200
Total TPHg (lb)						0.200
Total TPHg (gals)						0.033
Total TPHg (lb.)						0.41
Total TPHg (gal.)						0.0671

Residual MTBE

Zone 1

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.360	343	20	0.35	2,401	864.4	0.05383
Total MTBE (lb)						0.05383
Total MTBE (gals)						0.0088

Zone 2

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.0320	1,823	20	0.35	12,761	408.4	0.02543
Total MTBE (lb)						0.02543
Total MTBE (gals)						0.0042

Calculation of Residual Dissolved-Phase Contaminant Mass June 2005

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Zone 3

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.00320	5,929	20	0.35	41,503	132.8	0.00827

Total MTBE (lb)	0.00827
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Total MTBE (gals)	0.0014
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Total MTBE (lb.)	0.034
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Total MTBE (gal.)	0.0055
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A = Area

h = thickness

V = volume = A * h

n = soil porosity (assume 35%)

TPHg mass = V (ft³) * Mean TPH conc. (unitless)

MTBE mass = V (ft³) * Mean TPH conc. (unitless)

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = methyl terterary butyl ether

lb = pound

mg/L = milligrams per liter

gal. = gallons

ft. = foot

Calculation of Residual Dissolved-Phase Contaminant Mass December 2005

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Residual TPHg

Zone 1

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
0.270	837	20	0.35	5,859	1,582	0.099
Total TPHg (lb)						0.099
Total TPHg (gals)						0.016

Residual MTBE

Zone 1

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.350	364	20	0.35	2,548	891.8	0.05554
Total MTBE (lb)						0.05554
Total MTBE (gals)						0.0091

Zone 2

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.0320	1,339	20	0.35	9,373	299.9	0.01868
Total MTBE (lb)						0.01868
Total MTBE (gals)						0.0031

Calculation of Residual Dissolved-Phase Contaminant Mass December 2005

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Zone 3

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.00320	6,409	20	0.35	44,863	143.6	0.00894

Total MTBE (lb)	0.00894
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Total MTBE (gals)	0.0015
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Total MTBE (lb.)	0.028
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Total MTBE (gal.)	0.0045
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A = Area

h = thickness

V = volume = A * h

n = soil porosity (assume 35%)

TPHg mass = V (ft³) * Mean TPH conc. (unitless)

MTBE mass = V (ft³) * Mean TPH conc. (unitless)

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = methyl terterary butyl ether

lb = pound

mg/L = milligrams per liter

gal. = gallons

ft. = foot

Calculation of Residual Dissolved-Phase Contaminant Mass March 2006

Cedar Stock Resort, Trinity Center, CA

Project No. NC-017

Residual TPHg

Zone 1

TPHg mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	TPHg mass (ft ³ -mg/L)	TPHg mass (lb)
0.870	1,128	20	0.35	7,896	6,870	0.428
Total TPHg (lb)						0.428
Total TPHg (gals)						0.070

Residual MTBE

Zone 1

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.410	376	20	0.35	2,632	1,079.1	0.06721
Total MTBE (lb)						0.06721
Total MTBE (gals)						0.0110

Zone 2

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.0320	2,524	20	0.35	17,668	565.4	0.03521
Total MTBE (lb)						0.03521
Total MTBE (gals)						0.0058

Zone 3

MTBE mean (mg/L)	A (ft ²)	h (ft)	n	V (ft ³)	MTBE mass (ft ³ -mg/L)	MTBE mass (lb)
0.00320	7,724	20	0.35	54,068	173.0	0.01078
Total MTBE (lb)						0.01078
Total MTBE (gals)						0.0018

Total MTBE (lb.)	0.046
Total MTBE (gal.)	0.0075

A = Area

h = thickness

V = volume = A * h

n = soil porosity (assume 35%)

TPHg mass = V (ft³) * Mean TPH conc. (unitless)

MTBE mass = V (ft³) * Mean TPH conc. (unitless)

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary butyl ether

lb = pound

mg/L = milligrams per liter

gal. = gallons

ft. = foot